

CU

AMIGA

M A G A Z I N E

March 1997 £5.99 US\$13.50 • 122,540 • ABC1235 • BFR 520 • DM 25.00

Graphics Overdrive!

New 3D Graphics card plus software round-up



On the CD

OctaMIDI SoundStudio

UK Amiga show!
Full details inside...
Amazing Audio!
Turn your Amiga into a stereo studio!

The Chaos Engine 2

Quickcam
Miniature Amiga video camera



No CD-ROM? Ask your Newsagent!



CD-ROM edition
(£5.99 disk edition also available)

are you thinking of
UPGRADING
your amiga?



Cyrix

CREATIVE
CREATIVE LAB

YAMAHA

matrox

Power Computing's PCs only use top
branded components. They use the best
CPU and graphics cards available.
In Brand Model Systems are only
between \$800 - \$900

CPU PROCESSORS

CYRIX 166+ £119.95
CYRIX 166 £89.95
PENTIUM 166MHz £149.95

VIDEO DRIVERS

QUANTUM FIREBALL 1.2 £119.95
QUANTUM FIREBALL 2.5 £109.95
QUANTUM FIREBALL 3.2 £129.95

PC MONITORS

17" AOC SVGA COLOUR £449.95
15" AOC SVGA COLOUR £219.95
14" AOC SVGA COLOUR £179.95

AOC monitors come with a 3 year
warranty, the first is on-site

PRESTIGE PC ELITE

Mid Tower Case - Branded
LXIII P55 TV Lite 332K Cache
Cyrix or Pentium CPU
16MB 7200 SMMWS EDU
3 2GB Quantum Fireball HD
1 AMB floppy disk drive
Keyboard Keyboard (W355)
Microsoft Windows 3.11
Diamond Stealth 3d 2000 2MB
12x CD-ROM - IDE Panasonic
15" MFD Digital SVGA
Soundblaster 32 PnP
Yamaha YMS MS Speakers
Microsoft Windows 3.11
Microsoft Works & Money

PRESTIGE CYRIX 166+ £1199.00
PRESTIGE PENTAM 133 £1395.00
PRESTIGE PENTAM 166 £1499.00
PRESTIGE PENTAM 200 £1699.00

ULTIMATE PC ELITE

Mid Tower Case - Branded
LXIII P55 TV Lite 512K Cache
Cyrix or Pentium CPU
32MB 7200 SMMWS EDU
3 2GB Quantum Fireball HD
1 AMB floppy disk drive
Keyboard Keyboard (W355)
Microsoft Windows 3.11
Diamond Stealth 3d 2000 2MB
12x CD-ROM - IDE Panasonic
15" MFD Digital SVGA
Soundblaster AWE 64
Yamaha YMS20 DSP Speakers
Microsoft Windows 95
Microsoft Works & Money

ULTIMATE CYRIX 166+ £1499.50
ULTIMATE PENTAM 133 £1699.50
ULTIMATE PENTAM 166 £1799.50
ULTIMATE PENTAM 200 £1999.50

INTERNAL MODEM

Internal fax modem (uniting at
33.6Kbps. Ideal for the Internet,
33.6 INTERNAL MODEM £49.95

FLOPPY DRIVES

XL 1 750MB DRIVES
The expert winning XL 1 750MB
drive allows you to store 176MB
on a high density disk

POWER FLOPPY DRIVES

3.5MB SUPRA XL DRIVE £29.95
1 750MB XL DRIVE EXT £49.95
1 750MB XL DRIVE INT £29.95
1 750MB XL DRIVE EXT £49.95
1 750MB XL DRIVE INT £29.95
PCB81 A500 INT £29.95
PCB81 A500 EXT £29.95
PCB81 A500 INT £29.95
PCB81 A500 EXT £29.95

STORAGE

HARD DRIVES
1.2 GIGABYTE IDE £139.95
FOR OTHER SIZES PLEASE CALL
JAZ 1GB RAMDISK DRIVE
The Iomega Jaz drive is a fast
reliable portable storage unit. It
reads and writes data at 10MBps
and is the size of a small book. Includes
Squirrel Inter face, tools, cables
and one 1GB cartridge

JAZ 1GB DRIVE - CART £49.95
ZIP DRIVE (Inc cables, Zip tool)
2IP DRIVE 100MB SCSI £149.95
2IP DRIVE INC SQUIRREL £89.95
100MB DIRECT £19.95
- requires the Squirrel interface

A500 MTEC HD
Extra! 121 hard disk for the
A500 comes complete with an
internal ROM switcher, and
upgradable to AMB RAM

MATEC AT500 BARE £49.95
PLEASE CALL FOR OUR
SPECIAL OFFERS

FLOPPY EXPANDER
Save 1 5MB on a standard floppy
drive and 3MB when used in
conjunction with the XL Drive
1 750MB
FLOPPY EXPANDER £10

STORAGE

VIDEO BACKUP 1
Backup to 320MB onto a 4hr
VHS tape. Version 3 has new
backup modes for King's with
a 68000 or higher CPU

VIDEO BACKUP SCART £39.95
VIDEO BACKUP PHONO £29.95
UPGRADE TO VERSION 3 £20

MEMORY

PC1208 MEMORY
A1200 8MB RAM card which
uses 1.4 32 SIMMs and is PCMCIA
friendly
PC1208 BARE £59.95
PC1208 4MB £84.95
PC1208 8MB £114.95

MEGACHIP RAM

MEGACHIP RAM 500/2000 chip
RAM for a total of 2MB. MEGACHIP
does this by using its own 2MB
RAM and also now includes a 2MB
ECC Agnus. No soldering required
MEGACHIP RAM 2MB £39.95
MINI MEGACHIP 1MB £39.95
MEMORY SIMMS
1MB 30-PIN £35.95
4MB 30-PIN £39.95
8MB 72-PIN £39.95
16MB 72-PIN £39.95
32MB 72-PIN £109.95

ASPIRE MEMORY

A500 512K WITHOUT CLOCK £19.95
A500 512K WITH CLOCK £29.95
A500 2MB TAPEDOWN RAM £39.95
A500 1MB £39.95

ASPIRE MEMORY

A500 512K WITHOUT CLOCK £19.95
A500 512K WITH CLOCK £29.95
A500 2MB TAPEDOWN RAM £39.95
A500 1MB £39.95

ASPIRE MEMORY

A500 512K WITHOUT CLOCK £19.95
A500 512K WITH CLOCK £29.95
A500 2MB TAPEDOWN RAM £39.95
A500 1MB £39.95

ASPIRE MEMORY

CD-ROM

The Power CD ROM for the
Amiga 68010 plug directly
into the PCMCIA port and
provides a direct SCSI-1 and
ATAPI interface to all
additional devices to be
reconnected. What's more the
Power CD-ROM features a 'Hot-
Plug' which allows you to
connect and disconnect the CD
drive without the need to shut
down even when the Amiga is
switched on

The CD ROM drive comes with a
SCSI interface for SCSI hard and
floppy drives. It also includes
software which includes Audio
CD, CD32 Emulator, MPEG Film
Decoder and Photo CD

A8001200 40 SPEED £179.95
A8001200 40 SPEED EXT £199.95
A8001200 SCSI INTERFACE £129.95
SCS CABLE £50

MEGACHIP RAM

MEGACHIP RAM 500/2000 chip
RAM for a total of 2MB. MEGACHIP
does this by using its own 2MB
RAM and also now includes a 2MB
ECC Agnus. No soldering required

RAPID FIRE

RAPID FIRE SCSI II
Rapid Fire SCSI II controller
board. Install up to 8MB on-
board for the A2000, A1600
and A4000

RAPID FIRE SCSI II

RAPID FIRE SCSI II £119.95

SC-32

SC-32 is an internal add-on card
for your CD32 and features VGA
port, RGB port, parallel port, serial
port, external disk drive port
(1 750MB), clock, romulator for 2.5"
hard disk, and a SMART socket up
to 16MB. Turn your CD-32 into a
A1200

SC-32 CARD £199.95
CD32 2.5" and CD ROM £99.95

XL CD-ROM

XL CD-ROM
£179.95

XL DRIVE

XL DRIVE
£69.95

CD32 DRIVE

CD32 DRIVE
£159.95

MEGACHIP

MEGACHIP
£99.95

ASPIRE

ASPIRE
£89.95

ASPIRE

ASPIRE
£89.95

ASPIRE

ASPIRE
£89.95

ASPIRE

News

16 Find out the truth behind the new Amiga owner rumours, plus news on the forthcoming World of Amiga Show and more.

Games

Previews

36 Virtual Karting Deluxe

36 Max Rally

37 Ffigy

Reviews

38 Burnout

42 JETPilot

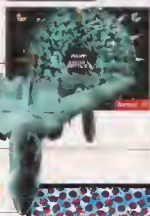
43 XP8 non AGA

44 Budget Games

Game Tips

46 Vampyra

49 Snip Tips



Tech Scene – utilities and hardware

52 Cybervision 3D

54 Graphics Software Roundup

56 SMD 100 MPEG Player

60 Quickcam Interface

62 Geek Gadgets

63 Golden Imaga Trackball

64 PD Scene

67 PD Utilities

70 CD-ROM Scene

72 Art Gallery

Workshop

76 3D Rendering: Imagina 4.0

79 Imagine 4.0 Manuel Offer

82 OctaMED SoundStudio

84 Wirad World

86 Net God

88 Surf of the Month

92 Advertisement index

94 Masterclass

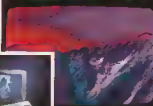
97 Frequently Asked Questions

98 Q+A

102 Backchat

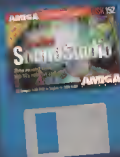
104 Points of View

106 Subscriptions



Graphics roundup 94

cover disks Loading instructions



Cover disk 152 OctaMED SoundStudio

OK, first things first, make sure you write protect the disk before you go any further.

Installation of OctaMED SoundStudio is very straightforward. Load up Workbench and format a couple of blank disks. Then insert disk 152 and double click on it. The

disk window will open up to reveal a pair of icons. Double click on the first icon and in a few moments you will be asked to insert a blank disk and press return. Follow the on-screen instructions and disk one will be unpacked to the floppy for you. Write protect your new OctaMED SoundStudio disk one, and repeat the procedure for disk two by clicking on the second icon and inserting the second blank disk when prompted. The OctaMED SS disks aren't bootable; to use them you will have to start Workbench first. There are two icons in disk one titled Floppy assigns and Floppy fonts. Click on these and everything is ready to run. Hard disk users will have to backup to floppies first, as described above. There is no HD installer, you will have to transfer the files yourself. Click on the readme, first! icons in disk one for full instructions on how to do this.

IF YOUR DISK/CD WON'T LOAD

Be up to great trouble to ensure that the CD Image Magazine cover disks will work on common Amiga systems. However, if you do experience problems follow this simple guide.

1. Remove all unnecessary upgrades and peripherals, such as printers and modems. Some trapdoor expansions can also cause problems.
2. Follow the conventions on two and driveless pages closely.
3. Extract via 2.5 inch disk people: DISKOPRESS, 7 MILLAN COURT, BOXTON INDUSTRIAL PARK, BOXTON-ON-THE-MARSH, GLOUCESTERSHIRE GL54 2NE, TEL: 01451 810100.
4. Tel: 01451 810100. Email: 01451.334@compuserve.com
5. If they advise that the disk is faulty, SS is now available in the form below, and send the form, along with the faulty cover disk and a 256 kilobyte self-addressed manila envelope to: CD Image Magazine Disk Return, DISKOPRESS, 7 MILLAN COURT, BOXTON INDUSTRIAL PARK, BOXTON-ON-THE-MARSH, GLOUCESTERSHIRE GL54 2NE, TEL: 01451 810100.
6. We also vigorously urge check our cover disks on a branded drive checker. If some escape our attention we cannot assume responsibility for it.

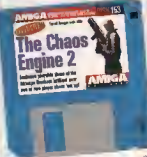
NAME: _____

ADDRESS: _____

TYPE OF AMIGA OWNER: _____ DISK NUMBER: _____

DESCRIBE EXACTLY WHAT HAPPENS WHEN YOU TRY TO LOAD THE DISK

Cover disk 153 The Chaos Engine 2



Welcome to the amazing Chaos Engine 2! You will be glad to know that this game needs no installation—I'm sure you are all itching for some Steampunk action, so just switch on, boot from disk 153 and go!

After a few moments you will be presented with an option screen. Move the joystick up and down to pick your selection, then press fire. First you are asked to choose a one or two player game, then you are offered a choice of four characters to play. The Navvie is slow

and dumb but totally nails, the Gentleman fast and clever but weak, the Brigand average but smart and the Mercenary average but aggressive. Once you have chosen, press fire again and soon you will be presented with a briefing screen which tells you what to do. Fire will and this and get you to the action.

Gameplay is quite straightforward. To progress through the level you must switch wall switches by walking up to them and pressing fire, and open doors (if you have a key) in a similar way. Any dynamite you may find can be thrown by pointing in the way you want it chucked and holding the fire button for a few seconds, and you can shoot the nasties by... no, you can figure that one out yourselves.

The level ends when one or other player has made their way to the last door with the key, so watch out. Your so-called partner may suddenly turn on you just when you thought you were safe.



Pro-GRAB... Freezes Frames

The Cool way to Grab Images on your Amiga

CHECK OUT OUR NEW ProGrab™ Sound Samplers and PCMCIA Interface



Compatible with both VHS and S-VHS!

Grab images with your camcorder including S-VHS

or Take a signal from a TV with SCART output

or Use the signal from your satellite receiver

or Grab TV or video pictures from your VCR's video output including S-VHS

ProGrab is just £129.95...

ProGrab 24RT Plus

- Supports all recent Amiga and is also fully VGA Output compatible. You can monitor images in any Windows screen resolution including HD64 mode (Apple ROM processor)
- Stores and loads images in HYPHEN, HYPHEN, JPEG, RAW, and Targa file formats. ProGrab saves attachments as JPEG files and attachments with sound require PCMCIA interface and require sound card or event a MIDI file. A range of image processing effects, pixel comparing methods (RGB only) and drawing methods are featured in ProGrab Version 2.0.0. ProGrab's fully supports ProDraw with a support Sublayer to enable grids directly from within the program. Loading ROM files
- Software has built in menu and colour calibration facilities. Number of frames dependent upon Amiga 386k
- Release 2.0.2 software now includes:
 - ADDITIONAL TELETYPE FACILITIES: With either Terminal or Satellite TV system.
 - LARGER RESOLUTION: Double Resolution and 8 bit per pixel of previous ProGrab software.
 - INTERNATIONAL SUPPORT: Now compatible with European, UK, SCANA and NISG language based text

- ProGrab is supported with just about everything you'll need:
 - ProGrab™ 24RT Plus Digitizer
 - ProGrab™ Version 2.0.0 Software
 - Master Power Supply Unit
 - Parallel Port Connecting Cable
 - User Manual
 - Input sockets for Composite and DVHS

or a better quality card will be required to match your own equipment. As for details

or contact ProGrab hardware a PAL/SECAM/NTSC composite. Higher speed output can be achieved with PAL and SCANA only. ProGrab supports any Amiga with 10MHz 2.0M or 2.5M and a minimum of 1.5MB free RAM

The revolutionary S-VHS ProGrab™ 24RT Plus with Teletext is not only the best way to get crisp colour video images into your Amiga, from either live broadcasts or taped recordings, it also costs less than any of its rivals. This real time PAL/SECAM/NTSC™ 24-Bit colour frame grabber/digitiser has slashed the price of image grabbing on the Amiga and, at the same time, has received rave reviews for its ease of use and excellent quality results. ProGrab has earned honours from just about every Amiga magazine and Video magazines too. And... with ProGrab™ you needn't be an expert in Amiga Video Technology, a simple 3 stage operation ensures the right results - Real Time, after time.

STAGE 1...

Select any video source with S-VHS or composite output. This could be your camcorder TV with SCART output, satellite receiver, domestic VCR/player or standard TV signal passing through your VCR/player - the choice is yours

STAGE 2...

With ProGrab's software, select an image you wish to capture using the on screen preview window and Grab (because the hardware grabs frames in real time, there's no need for a freeze frame facility on the source device). Once grabbed, simply download and view the full image on your Amiga screen. ProGrab also includes a Teletext viewer and capturing facility from TV or satellite sources

STAGE 3...

Use the grabbed image with your favourite word processor, DTP or graphics package

ProGrab really does make it that simple!

Pro-GRAB S-VHS 24RT Plus

PCMCIA INTERFACE for A1200 and A600

Only £39.95

- ProGrab's optional PCMCIA interface includes the latest version software and some performance for semi-professional users, offering the following benefits:
 - Faster Downloading Times (up to 1/300 frames per second)
 - Improved processing speeds of up to 1/100 frames and 3/100 frames
 - Loading of individual frames to your Amiga's hard drive
 - 1 frame of your Amiga's hard drive for 1/100 frames or other can be processed
 - Source sampling and compression capabilities between source sampler input and the Amiga

STEREO SOUND SAMPLES

Two high quality stereo sound samples, each 1/100 frames per second, are designed to be used with ProGrab. Both samples are now available for PCMCIA interface included. The left version features the same 32000 Hz ADPCM sampling used in the ProGrab™ software. The maximum frequency is determined by the Amiga's hardware. It also has a higher resolution (16 bits) than the standard version.

Standard Stereo Sampler £19.95

Hi-Fi Stereo Sampler £24.95

WHAT THE MAGAZINES SAY...

Amiga User referred to using ProGrab as a high resolution image grabber. It's the only one that can grab images at this speed. A 24RT version, you want to see it.

ProGrab is the Best Video Hardware product for the Amiga. It is a really winning because the award comes from the Amiga Insider magazine, readers' Our Satisfied Customer.

Amiga Insider 1990/1991 Best Award for software. ProGrab 24RT Plus is the only one that can grab images at this speed. A 24RT version, you want to see it.

Amiga Insider 1990/1991 Best Award for software. ProGrab 24RT Plus is the only one that can grab images at this speed. A 24RT version, you want to see it.

Amiga Insider 1990/1991 Best Award for software. ProGrab 24RT Plus is the only one that can grab images at this speed. A 24RT version, you want to see it.

Post or FAX your requirements (quantity, trade prices available on the order form provided) OR if you'd simply like further information please contact:

GORDON HARWOOD COMPUTERS

Department CUA
Gordon Harwood Computers Limited
New Street, Alton, Derbyshire DE55 7BP
FAX: 01773 831040
email: 100271.3557@compuserve.com

01773 836781

Mr/Mrs/Miss/Ms.	Initials	Surname
Address		
County (Country)	Postcode	
Daytime Phone	Evening Phone	
ProGrab Plus @ £129.95 E PCMCIA Interface @ £39.95 E ProGrab Teletext Decoder @ £44.95 E Standard Stereo Sampler @ £19.95 E Hi-Fi Stereo Sampler @ £24.95 E Standard Delivery 12/13 Working Days E or an additional £3 for Next Working Day Delivery E TOTAL E		
Overseas Customers... Please call for prices, shipping etc. Card holder's signature.		
Card No	Valid From (Month/Year)	
Expiry Date	Issue Number (Batch Only)	

I enclose a Cheque/Bank Draft/Postal Order for £
 made payable to GORDON HARWOOD COMPUTERS LIMITED
 (Please name card, name and address on the order form or any request to us)

152 OctaMED SoundStudio

"Frankly there is no other software that can touch it in any department", we said when we reviewed OctaMED SoundStudio last year, rating it at a jaw-dropping 94%! Now this stunning piece of music software is yours, only with CU Amiga Megazine.

Fabulous features

- Up to 64 sample channels
- 16-bit sound card support
- 14-bit output from a standard Amiga
- 65kHz maximum output rate
- Stereo panning for each track
- Record audio direct to disk
- Make your own audio CDs
- Mix and match 8/16 bit stereo/mono samples
- Load and save IFF, WAV, VOC, RAW & AIFF samples



If ever there was a program that deserved the accolade of Ultimate Amiga Music Software, it's OctaMED SoundStudio. The OctaMED series has been running for many years gradually improving with each new update, but until

SoundStudio, it was limited by the basic constraints of the Amiga's 8-bit four channel sound chip. Those constraints are now blown clean away, as SoundStudio opens up a world of possibilities, such

as 64 sample channels, 14-bit output from any Amiga, 16-bit output via a range of sound cards, realtime echo effects, stereo panning for each track, even direct to disk recording in stereo 16 bit on any Amiga, which makes it possible to master tracks to hard drive and copy them to audio CD with nothing more than your Amiga and a CD-ROM writer!

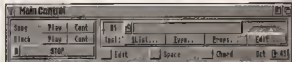
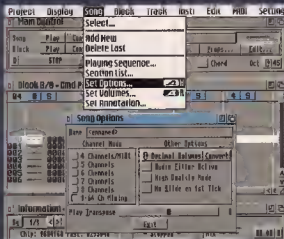
MIDI musicians are catered for too. A complete MIDI system can be driven from SoundStudio with ease, even seamlessly

incorporated with your existing sample-based set-up. You'll find the audio track on this month's cover CD-ROM was produced with just such a combination of MIDI and Amiga samples.

SoundStudio performs a range of minor miracles whether you've got a 2Mb A500 Plus, a tool'd up A4000T with a 16 bit card and CD-ROM writer or anything in between, transcending the previous limits of your Amiga and turning it into an incredibly powerful music-making machine.

Getting started

If you have the CD edition the best way to find out what SoundStudio can do is to load one of the demo modules on this month's CD. Otherwise find at least one multi-channel module to load and play. Select Open from the Project menu and then use the standard file requester to choose a SoundStudio module from the



relevant section of the disk or CD.

Before you play the module, make sure you have the 'mixing' mode activated. To do this, select Set Options from the Song menu and click on the 1-64 Ch Mixing button, followed by Exit. This takes SoundStudio out of standard Amiga four channel mode and into its own special multi-channel retargetable audio mode.

Next you can select your preferred output mode. Go to the Settings menu and select Mixing Settings. This gives you a number of main output options listed at the top left of the box. If you have one of the 16-bit sound cards included in the list, select that. If not you can still use the Amiga 14-bit option for high quality output from the standard Amiga audio chip.

The other settings are also important to get the best sound quality from your setup, but for now just click the Stereo button and then Exit. Now click the top Play button next the Song on the Main Control panel to hear the tune.

You'll notice the pull-down menus change as you select different sections of the program. If at any time you want to get back to the main menus, click on the Main Control panel to activate it and the available menus will change. If you close any of the editors or panels you can always bring them back by selecting them from the Display menu. Any that aren't listed in the Display menu can be activated from other menu options.

Online help

At any time you can call up the AmigaGuide online help document by pressing the Help key. This is a fairly comprehensive guide to the many different areas of the program and should answer most questions and problems that arise as you find your way around. ■

Where next?

Now you've had a brief introduction to OcsMED SoundStudio you can get started on our new tutorial series, the first part of which can be found on page 82. But before you dive into that you could take a look at our feature on page 20, which has everything you need to know about turning your Amiga into a complete professional sound studio.

Main controls

The main control panel houses some of the more commonly used buttons and also offers quick access to four of the most often used sub-editors. The top left corner houses the playing control buttons: Play and Continue for both the whole song and the current track, plus Stop. The D button sets SoundStudio in record standby mode, started whenever you next press a key. Along the bottom of the Main Control panel are three check boxes: Edit toggles edit mode in which your keyboard presses are recorded onto the current track, Space turns on double-space mode (can be altered to any spacing you require) and Chord allows you to enter chords from the keyboard (limited on A1200 due to a hardware fault). The Oct button displays the current octaves assigned to the keyboard. The top section displays the current instrument number, its name and its length in bytes.

The four buttons in the middle of the panel open up the sub-editors below:

Sample List

This is a way of saving time when you want to load in a new sample. Instead of fledding around on a range of disks and drives to find the right instrument, you can use this to browse your sound collection from a pre-loaded list of all your instrument directories. This is very handy if you have a hard drive with a number of different sample directories, and especially useful if you are limited to working from floppy disks. If your chosen sample is on a floppy or an unmounted disk, you'll be asked to insert the relevant disk by name.

To add your own sample directories to the list, go to the Display menu and select Sample List Editor. You can then add a number of directories which will be scanned for filenames and added to the Sample List. Select Save List to save the changes.



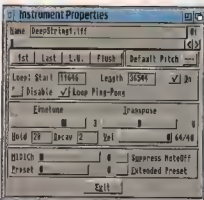
Type

An instrument in SoundStudio is not necessarily an 8-bit Amiga sample. It could be 8-bit or 16-bit stereo or mono. It doesn't actually have to be a sample at all. It could be a synthetic sound made in the Synth Sound Editor or a hybrid cross between a synth sound and a sample. It could even be an external sample, which is a neat way of using a sample via MIDI from a second Amiga running SoundStudio. If you have an Aura sampler you can set certain sounds to replay through it, likewise with a Toca2 card. However, these last two selections are only relevant if you are using standard four channel mode (as opposed to 1-64 channel mixing mode).



Props

This jumps to the Instrument Properties window. It offers quite precise control over certain aspects of each instrument. For example, the Hold and Decay values allow you to set default values for the sustain and release times of each instrument. This is also where you set up any MIDI instruments to be used in your tracks. If you are using the 1-64 Channel Mixing mode you can also set up ping-pong loops for sampled instruments, in which the sound is first played forwards, then backwards and repeated indefinitely.



Edit

This will take you to the sample editor, unless you have selected a synth sound, in which case you'll see the synth sound editor instead. The sample editor is a very powerful part of SoundStudio, giving you precise control over your sampled instruments. This allows you to individually edit every byte of your samples, either by drawing on the waveform display with the mouse, or with the help of the many editing and effect options.



**"World of A1200" & "Top 100 Games"
CDs FREE with every CD ROM drive!!!**

DISCOLOGY

...is the ultimate in disk copying for the Amiga. The package supports the Discology Data, manual and cartridge for Amiga of, heavily protected with an anti-disk drive. Discology will convert disks for Amiga 1200.

ANTIVIRUS

...is the most powerful anti-virus software and scanning virus. Anti-virus will check and delete any virus files and even CD-ROM drive viruses. Only bought for work. It includes a full 30 page manual.

**ORDER NOW
BEFORE A VIRUS DESTROYS
YOUR SYSTEM !!!**

PLEASE PHONE FOR A FULL INFORMATION SHEET

**£19.99 EACH OR BUY
BOTH FOR £24.99**

TOTAL MEMORY EXPANSIONS

A1200 has a built-in memory expansion feature. It has a battery-backed clock and a native two-processor CPU. Unlike other memory expansions that conflict with the PDAGA part of memory operations, include unique software that will enable the maximum amount of memory to be used even with a PDAGA filing device.

NEARLY DOUBLES THE SPEED OF THE A1200

4MB MEMORY EXPANSION £69.99

8MB MEMORY EXPANSION £89.99

33MHz 65882 FPU (PLOC)

£49.99 or only £24.99

when purchased with above

MONSTER SALE

VALID FOR 4 WEEKS ONLY

DATAFLYER SCSI+

Now Includes CD ROM drivers and instructions.

The Dataflyer is a 16-bit SCSI 3 controller card that converts the signals on SCSI external IDE interface devices into SCSI devices at the same time as the IDE hard drive.

The Dataflyer SCSI+ will operate up to 5 SCSI devices such as CD-ROMs, hard drives. Support removable disks, tape back-up drives etc. Unlike other SCSI controllers, the Dataflyer SCSI+ is compatible with all SCSI controllers etc and it does not steal you from any of the important expansion ports as A200/A500. The Dataflyer SCSI+ really turns your A1200/A500 into a super computer. It's the best of both worlds. It's ready to go and it's 25 megabyte controller. The starting price at the back of the A1200, A500 and A1000.

**DATAFLYER ONLY £79.99 or
£49.99 when purchased with a SCSI device**

MODEMS

Our highly rated, top quality feature packed modems are ideal for Amiga users. All modems include our FREE MODEM ACCESSORIES PACK (worth £10) which includes a cable to connect the modem to the Amiga, NOCART error software, Amiga Guide to Modem and a list of Modem Boards from which you will be able to download various products of free software as well as have access to EMM, facilities.

• **BNP 2-4 Error Correction** • **BNP 3 Data Compression** • **Fax Class 1 and 2 compatible** • **Group 3** • **Hayes Compatible** • **Full 80 page manual** • **12 Months guarantee**

14400 MODEM £69.99

33600 MODEM £109.99

NET AND WEB SOFTWARE £34.99

ALSO AVAILABLE...

EXTERNAL FLOPPY DRIVE £49.99
A600/A1200 INTERNAL FLOPPY DRIVE £44.99
A500 INTERNAL FLOPPY DRIVE £49.99
MOUSE £12.99
3.5" HARD DRIVE CABLE £17.50
2.5" HARD DRIVE CABLE £9.99
FRESH FONTS CD £19.99

PHOTO CD-MANAGER £19.99
AMIGA POWER SUPPLY £34.99
CLOCK CARTRIDGE £19.99
CACHE CDFS £44.99
EPIC ENCYCLOPEDIA £19.99
CD(full version)
WORLD OF A1200 CD and TOP 100 A1200 GAMES CD £7.49 EACH or FREE with every CD ROM drive!!!

SQUIRREL ONLY £49.99 or £39.99 when purchased with a SCSI device
SQUIRREL £89.99 or £74.99 when purchased with a SCSI device

**Freephone 0500 340548
to place your order**

What's on Super

OctaMED SoundStudio, Cheos Engine 2 demo and whole lot more on this month's top quality CD.

How to use CUCD8

As with prior cover CDs, CUCD8 can be used either by booting on a CD32 or A1200/4000 with adequate CD32 emulation. The CD will not boot under any Kickstart earlier than 3.0. If using the CD via Workbench and intending to run software directly off the CD then it's important to first click on the 'Init CD' icon. This sets up various assigns and makes MUI 3.6 temporarily available if it is not already installed. It's worth noting that running software directly from CD is a touch-and-go business. While we've gone to a lot of effort to make many programs run from the CD, others may have to be dragged to your hard drive either manually or by running an included installer. 'Init CD' also runs the New Icons patch so don't be surprised if the icons change afterwards.

A word on demos and games

Demos and games are almost never coded in a so-called OS Legal way. That means that while they may work for us, they might not work for you for several reasons. Either your hardware set-up is slightly different or some third party software running on your Amiga may upset the demo or consume resources that the demo/game requires. Please do not assume the CD is simply 'faulty' if any of this software refuses to run.

It simply isn't practical for us to make everything on the CD run on every possible hardware / software configuration. The majority of files will be fine on the majority of systems, but the further away your system is from the norm, the more that won't work on it. Do not be too surprised if you find some software doesn't work on your half meg Kickstart 1.2 A500 or your Power PC accelerated 4000T - the people who wrote the software probably didn't have one to check it on.

There are things you can do to make the software more likely to run. Closing down any other software screens and so on will free up resources. Best of all copy the demo/game onto your hard drive and then boot with no startup sequence. This involves resetting and holding down both mouse buttons then click on boot with no startup sequence. You'll then be placed into the AmigaDOS so you'd need to know enough about that aspect of your Amiga to navigate to where the offending software is and run it. As a general rule, if the game or demo still doesn't work then it's incompatible with your machine. Some demos will only ever work when run in this fashion. If you get a requester asking for a specific volume then the software needs 'assigns' set up and so is fairly likely it will have an installer that should have been run.

Finally, if you are having problems getting anything to run, please please make sure you have read all the documentation before you send your CD to Sberia in fury!

Chaos Engine 2

Here at CU Amiga Magazine we like to bring you the best there is. Second best just isn't enough. We'll fight people to get the good stuff if we have to, but there was no need to strap on the old knuckledusters this month when this beauty turned up. Chaos Engine 2 is one of the best games to hit the Amiga in ages, and it you don't believe me, there is a full level here for you to try out, with four characters to choose from and the excellent split screen two player mode ready to rock! The are separate AGA and A500 versions on the CD.

What's in your drawers

Aoah the sun is shining and the birds have broken into song. It must be that CUCD time of the month! Readers who have used a CU Amiga CD-ROM before will find everything fairly familiar. CUCD8 is set up as a Workbench disk, and can be booted from on an appropriate machine.

Clicking the INITCD icon will set up your system to run from the CD properly. The first thing that you may notice as a result of clicking on this is that all the icons change - don't panic, this is the excellent NewIcons system, not some obscure virus.

The Workbench 3.1 drawers such as Prefs, System, Utilities and Tools are in the root directory.



The audio track

This month's audio track is called Graffa, by our esteemed editor and music maestro Tony 'the Organ' Horgan. This great track (I had to say that he's the boss) demonstrates the capabilities of OctaMED SoundStudio. If you want to know more, you can read all about it in the feature article on page 25.

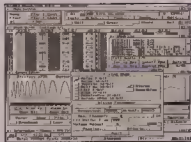
In the root directory of CUCD8

OctaMED Sound Studio

Judging by the number of mods we get sent every month, there are a lot of you out there who are into making music. If you are one of them, then you need this. This is THE Amiga sound package, 94% rated when we reviewed it in our September 96 issue. Yep this is it, the latest package. Well what would you expect us to give you? Some old version of OctaMED? Nah, not us.

The full Monty, as our antipodean CD editor would say.

A sample 16-bit track can be found in the parent directory of the samples drawer (the audio track from September 96). Select the open menu option, then click on parent from the file requester to locate it.



Using CUCD8 on non Amigas

If you don't have a CD-ROM for your Amiga but have access to a CD-ROM on another computer, you may still be able to get a lot out of CUCD8. Files can be copied onto PC formatted 720k disk, then loaded into your Amiga using CrossDos, which came as standard with Workbench versions 2 and higher. If you don't know how to use CrossDos, you will find it fully explained in the Workbench manual. Don't expect anything to run from the CD however.

CD-ROM 8?



Utilities

Multiview, Clock and some tools for working with Newlcon images can be found here

Tools

...contains the Workbench 3.1 tools drawer

Prefs

The Workbench 3.1 preferences drawer and Newlcon prefs

System

The 3.1 system drawer plus support files. The latest versions of MUI 3.6, PPSShow, Visage, Flick, Parnet, Newlcons, HappyENV, GMPlay, Hippoplayer, Play16, DeliTracker and SuperView are all crammed here to aid access to the rest of the CD

WWW

Who needs a modem when you have CUCCDB? We've taken a load of web sites and stuck them on the CD for you to browse at a speed that would give the fastest modem a nervous breakdown. iBrowse and Aweb are both here for you to use, just click on the one of your choice and get browsing. The QuikPak, Phase5 and PIOS websites are all here... so you can make up your own mind as to who has the safest pair of hands for the future of the Amiga. All the latest and greatest products can be previewed on the websites of H-Q, Blittersoft, Cloanto and the AmigaMail

Surf of the month pages include a Red Dwarf site, the met office pages (don't expect today's weather), and in keeping with this month's musical theme we've chucked in websites from Japanese music electronics giants Yamaha, Roland and British mixing desk masters Soundcraft

Inside the CUCCD drawer

On-line

All sorts of utilities for the net-heads amongst you, including mail ...tch, Voodeo, Amifolk, the Amiga index and a bunch of toolbar icons for iBrowse

Programming

Birds do it, bees do it, even educated fleas do it... let's do it... let's code a chunky to planar routine. And if you aren't sure where to start, how about the full, complete source code for Alien Breed 3D2? The question on everyone's lips... who will complete it first? If Unix is more your

flavour, check out the Ikemul developers kit and get that Unix emulation library to sing your tune. All this lost on you? Yearning for do... while loops and sprite banks? Check out the AMOS FAQs! We cater for all tastes

Graphics

More anims to tickle your fancy and lots of icons, around 40Mb of objects for users of Imagine, fractals, trekke pics and more

Readers

Lots here this month, including some stuff we couldn't cram onto last month's disk such as Georges Segal's 8Mb Imagine anim, some great organic art by Joel Nicklasson and some nice hand drawn and composites by Jon Scott. Great games include Space Farming, an enormous SF strategy game by King* Knut Olav Laito, utls include an X-files guide so detailed it's spooky and the amazing Global Mapping System. Animator Dale Hemmway shows off his new Zip drive by sending us 34 Mb too!

Demos

Check out the entries to the Party '96 demo competition for the cutting edge of Amiga demo programming. Some of these require fairly powerful computers to run... so check any accompanying text files first.

Information

The latest version of the AmigaGuide to the Amiga's shared libraries. All those libraries that have been hanging around on your hard drive for years that even Muldai and Scully couldn't explain fully documented. Also the latest updates on Team Amiga

Utilities

Check out MagicMenu, an intuition improver, and the amazingly useful SearchGuide, which can save a lot of hunting when you are looking for something buried deep inside a big AmigaGuide

Sound

Check out the latest version of the brilliant Hippoplayer, the player that copes with more sound formats than anything else. This is the one we use as our default player for all the mods on CUCCD-ROMs. There is also a MIDIplayer with a bunch of sample midi tracks and another stack of mods to keep your neighbours awake late into the night.

Games

Hay, who needs all this boring serious stuff, where are the games? Here, you wignut! Check out Deface, a great little puzzler, and the demo of the 256 colour high-res demolition derby that is Burnout. There are also a selection of Worms levels and replacement sounds and some card sets for Klondike

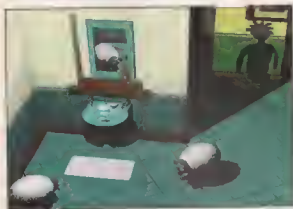
Driving CUCCDs

Generally driving CUCCDs is as simple as clicking on an icon of something you want to run, play, see etc. You should find it will automatically activate a player, viewer or run the program without further ado. Of course if you access CUCCD from a directory utility then you can use your own choice of players, viewers etc. on the specific files

We can't emphasise enough the importance of clicking on any readme or other documentation files inside each directory. There's simply too much material for us to detail here so you'll have to explore, read the documentation and see if each program or whatever is of use or interest to you

So have fun exploring CUCCDB and don't forget to send us any work of your own so we can include it on letter CDs! Also feel free to write into the magazine and tell us what you'd like to see on future CDs or how you'd like to see them organised. Address all letters of this topic to CD Editor. Enjoy!

Get your work published!



Do you have software, artwork, utilities, mods, games or any other Amiga creations that you think are worthy of inclusion on a Super CD? If so, get them to us now and give your work a worldwide audience. The best music module each month even gets recorded onto the CD as an audio track!



How to send your work in

All entries, including artwork must come to us on one or more disks. Otherwise they can be uploaded to an FTP site as detailed here.

Make sure you label your disks clearly with your name and address, the name of what you are sending to and the category it is being sent into (lib, the art, work).

Important: we cannot accept anti-virus disk-based software for use on the CD. We require files which can be used in real time from the CD-ROM. Please include all the relevant details regarding system requirements and usage instructions within an ASCII text document with your submissions.

Please complete the following form and enclose it with your disks

System requirements for the enclosed files

My name:

My address and postcode:

My phone number:

I hereby acknowledge that the material enclosed is of my own creation and/or I own the copyright to the material and grant CU Amiga Magazine the rights to publish this material on a forthcoming cover CD-ROM.

Send your

contributions including the form (left) to: CD Contributions, CU Amiga Magazine 30-32 Farringdon Lane, London EC1R 3AU.

If you want to send it to us via our FTP site or Email then this is also welcome. We would suggest that you include all of the information on the postal form left in an accompanying doc to make sure your entry is processed properly. Our email and FTP addresses are:
Internet FTP: <ftp://cu-amiga.co.uk/users/cu-amiga/incoming>
OR Email (MIME only): cd-contrib@cu-amiga.co.uk

Conditions

1. When you send to us must be your own creation as you must own the copyright to it. Please indicate this in the relevant space on the form.
2. It will be assumed that you carry no reserve, in the form we receive it, will be freely redistributable unless otherwise stated.
3. The publishing rights for all items sent to us marked for inclusion, remain public domain, shareware or commercially copyrighted will be assumed assigned to us for the purposes of placement on a CU Amiga Magazine CD-ROM. Full title and original copyright for all items remain with the creator.
4. CU Amiga Magazine makes no offer of payment whatsoever for material marked for inclusion which is published on a CU Amiga Magazine CD-ROM.
5. Because of the anticipated volume of entries we will not be able to return your work.

Workbench file:		1	2	3	4
1. Name					
2. Filename					
3. Name					
4. Name					
5. Name					
6. Name					
7. Name					
8. Name					
9. Name					
10. Name					

Amiga Mice

Replacement Mice	£8.95
MegaMouse 400	£9.95
MegaMouse Plus (3 Button) ..	£10.95
Optical Mouse	£29.95
New Golden Image	
TrackBall	£19.95
Pen Mouse	£12.95
ideal for CAD)	



Floppy Drives

External Floppy Drive for all Amigas	£39.95
Internal Floppy Drive A500/A500+	£35.00
Internal Floppy Drive A600/1200+	£35.00
A Grade Double Density box of 50 disks including colourfull labels	£13.00



IDE Hard Drives

HARD DRIVES + AT BUS CONTROLLER FOR AMIGA 500+/A1500/A2000/A3000/A4000	
AT Bus hard drive controller	£69.00
Alfapower 640 hard drive controller	£99.00
Alfapower 640 640Mb hard drive	£199.00
Alfapower 1 2G 1 2Gig hard drive	£259.00
Other sizes please ring	
Memory for Alfapower-Plus (new) marked Alfapower-Plus	
4Mb SIMMS	£20.00
8Mb SIMMS	£30.00
16Mb SIMMS	£79.00
Memory for Alfapower (old)	
Every 2Mb Zip-Rams	£89.95



Controllers

Alfapower Hard Drive controller A500	£99
AT Bus Hard Drive controller A2000	£69
Oktagon 2008 SCSI controller	£99
Multitask III	£79
PCMCIA Controller for CD-ROM for A1500	£69

Spider

NEW MULTI I/O CARD	
FOR AMIGA 1500/2000/4000	
Active 8 port high speed serial card	
Multitask Support 57600 Baud rate on all channels simultaneously	£299

New AlfaQuatro

Specialty made hardware and software Allows 4 ATAPI devices, ie, 2 IDE hard disk & 2 IDE CD Rom to Amiga 4000 internal IDE controller, through Alfapower on Amiga 500/500+ and possibly Amiga 1200 comes, with full IDE Fix software	£59
--	-----

Joysticks & Joypads

Amiga Joysticks	£9.95
Amiga Joypads	£9.95

Speakers

Multimedia Speakers 100 watt (pmo)	£30.00
Multimedia Speakers 240 watt (pmo)	£45.00
Multimedia Speakers 300 watt (pmo)*	£59.95
* 3D surround sound	



92% AUI

Miscellaneous Products

DD floppy disks (50) including multicoloured disk labels	£13.00
DD floppy disks (100) including multicoloured disk labels	£25.00
3.5" Hard Drive Kit for A600/1200 + install software	£15.00
Colourful Mouse Mat	
Animal Jungle design and Dinosaur design	£5.00
Optical Mouse Mat	£5.00
2 in 1 Scanner/Mouse Pad	£5.00
Can be used as a mouse pad	£3.00
Contoured Wrist Pad	£3.00
Plain Wristrest	£2.00

CD Cleaners - 1/2 price

CD Rom Cleaner	£3.00
Antistatic CD Rom Cleaner (blowers powered)	£10.00
Laser Lens Cleaner	£4.50

Complete CD Rom for all Amigas

Quad Speed CD Rom for A500 (needs Alfapower V8.8 or higher)	£129
Quad Speed CD Rom for A600/A1200 (inc. CD32 emulation)	£149
Quad Speed CD Rom for A1500/A2000/A4000	£109



Special Offer for this Month

640Mb 3.5" Hard Drive	£99
1.2Gig 3.5" Hard Drive	£165
1.7Gig 3.5" Hard Drive	£179
.5Gig 3.5" Hard Drive	£239
170Mb 2.5" Hard Drive	£79
20Mb 2.5" Hard Drive	£120
1200 4Mb Ram Board with clock	£49
1200 8Mb Ram Board with clock	£65
greyscale Scanner	from £79
Greyscale Scanner with OCR limited stocks	£99

STAR BUY

8 Speed CD Rom	£169
16Mb Viper 1230 33MHz	£199
4Mb Apollo 1220 25MHz with FPU	£79

Accelerator Boards

A1220 APOLLO Accelerator Board	£99.95
A1220 APOLLO Accelerator Board + 4Mb New Low Price	£79.00
A1230 VIPER Accelerator Board 33MHz	£119.95
A1230 VIPER Accelerator Board + 4Mb 33MHz	£169.95
A1230 VIPER Accelerator Board + 8Mb 33MHz	£180.00

All prices include VAT. Please add £3.50 P&P for items under £30.00, £5.00 for items over £30.00, £8.00 P&P for Scanners, Speakers & Hard Drives, £10.00 courier for next day. Tax Free Export Orders Welcome.

Golden Image accepts Access, Visa, Cheques & Postal Orders F&OE Prices subject to change without notice. Goods subject to availability. Specifications subject to change without notice.

GoldenImage (UK) Ltd

Unit 65, Hallmark Trading Estate, Fourth Way, Wembley, Middx HA9 0LB

Sales Hotline No: 0181 900 9291 Fax: 0181 900 9281

http://www.reserve.co.uk/gold Talking Pages: 0800 600900





News

New World of Amiga Show

A date has been set for the next World Of Amiga Show. It's to be held on Saturday 17th and Sunday 18th May 1997 at last year's venue, the Novotel in Hammersmith, West London.

The organisers promise that all the latest developments in Amiga technology will be on display. Apparently response from the Amiga industry has been very positive with a host of big name developers and suppliers all pledging their support for the show. Unconfirmed but reported to be 'pencilled in' for the show are names such as HiSoft, Digite, H-Q, PD Soft, Blittersoft and Epi among others.

Many of the exhibitors are planning to release and show new hardware and software developments, to such an extent that this year's show could be a

significant move away from the market-stall theme of recent years to a more conventional showcase for new developments. Even so, you can be sure there won't be any shortage of bargains to be had. Based on previous form, you should be able to pick up many current items at drastically reduced prices. So be prepared and take some spending money!

Last year's show was a big success with far more visitors attending than had been anticipated by the organisers. The size of the arena was far too small leading to a crush that lasted most of the show's duration. No doubt the lesson has been learned and this year's exhibition will be rather better organised so as to minimise queues and give everyone enough space to enjoy the show.

CU Amiga Magazine will be there of course. The CU Amiga



Magazine stand was totally mobbed last year and there are plans afoot to ensure that this year will be no exception with a

host of exclusives and surprises. Tickets on the door are priced at £8 for adults and £6 for children. See you there.

Haage & Partner Release StormC 2.0

The German distributor/developer Haage & Partner recently announced a StormC 2.0, the next version of their C/C++ compiler for the 680x0 series of processors.

New features include hierarchical projects, external ARexx control, persistent break points, disassembler, CPU register display and stack checking. Sounds promising for Amiga programmers, expect a review in CU Amiga soon.

Looking more to the future, Haage & Partner have also

announced Storm PPC for the Motorola Power PC CPU. A C compiler which runs on 680x0 Amigas but can generate Power PC output code. Very few details are available except that it is still in beta testing while it is optimised still further.

Given that it's the only PPC compiler available, it looks to be the essential tool for developers with Phase 5's PowerUP PowerPC cards.

Contact Haage & Partner on +49-8907-930050 for more information.

Epic Announce Games Label

Epic long time suppliers of CD-ROMs, have announced that they are moving into the games market with their own games label, Isions. They are planning to release their games primarily on CD-ROM, although disk versions of some of the titles will be made available.

Their first planned releases (priced around £25) are Kargon, a 3D Dungeon Master style adventure puzzler and Testament, a Doom clone.

Sixth Sense Investigators is another title pencilled in for an early release. Produced by



Cinetech, this Day of the Tentacle style game, was ported over from the PC using their custom adventure porting tool. This means that porting of PC CD-ROM adventure titles to the Amiga could become very cheap and therefore very attractive to publishers.

QuikPak for Amiga? Vulcan Swoop for Genetic Species



Following the announcement that ViScorp have in effect pulled out of the Amiga Technologies takeover deal (see News, March issue), Canadian computer manufacturer QuikPak have expressed an interest in acquiring the Amiga rights and technology.

The ever-fruited rumour mill has elevated QuikPak to the status of front-runner in the bid for the Amiga, although at the time of going to press there is no official evidence to back this up.

QuikPak are the company contracted to manufacture the A4000T for Escom's Amiga Technologies arm. They have since expanded their production to a range of early models of new A4000T-based machines.

Aimed squarely at the high-end of the Amiga market these new machines include the A4040L, described as a "luggable system".

The A4040L/A4060L is designed as a portable non-linear video editing system with a VideoToaster and a VideoToaster Flyer at its heart. It's advertised in a number of configurations of CPU and with or without the Toaster parts, with prices ranging from \$4495 to \$9995. An A5050T

is also promised, combining a 680x2 Pentium processor in one computer.

That little lot doesn't seem to offer much to the typical European Amiga user, with the Toaster only compatible with the USA TV standard NTSC, and prices likely to be translated directly from dollars to sterling (ie. \$4495=£4495). QuikPak have made noises about addressing the lower end scene but so far specific details have not been forthcoming.

In an open letter "to the Amiga community" posted on their web site (which has since been removed) QuikPak acknowledged the loyalty of Amiga users and asked for input and feedback.

You can catch up with the latest news from QuikPak from their web site at <http://www.amigasupport.com/quikpak>.



▲ QuikPak's A4040L luggable video editing system based on an Amiga and a Newtek VideoToaster.



▲ This shot is taken from QuikPak's web site, illustrating their A4040L. Notice how the screen has a PC Windows display. You may have seen other versions of this picture with an Amiga screen posted on Bp.



Vulcan software have signed the extremely impressive Doom clone Genetic Species from developers aMBROSIA.

A demo version of Genetic Species has been knocking around for a little while now, and has been generating some real excitement amongst Amiga gamers who have seen it.

Running at extremely acceptable speeds on a decent Amiga even at 1 by 1 pixels in 256 colour full screen mode, this game would be interesting even if it wasn't for the fact that initial impressions suggest that it will be very playable too.

Vulcan say they are working closely with aMBROSIA at the moment, helping them with the graphic design and gameplay. It is going to be a few months before Genetic Species hits the shops yet, but if it is as good as it looks like being, expect it to be the game of '97.

Vulcan say that they are being contacted by software developers all the time, they currently

have an amazing 20 titles either signed up or in negotiation, and are always happy to see more. They are offering a developers kit to interested parties which lists their terms of publication.

Vulcan appear determined to show that they are a lot more than just publishers of top down adventure puzzlers with sampled speech. Releases on their way include Breed 2000, oddly titled given that it is set in 2032ad, an SF strategy game, Strangers, a beat 'em up, ultra violent AGA, a blaster with three levels of pixel scrolling in 256 colours, and Hell Pigs, a huge graphic adventure/action title which will be released on CD and without the intros etc, on an astonishing 22 floppies. Vulcan Software claim this game is so good they almost fainted when they first saw it!

For more information about Genetic Species or any of Vulcan Software planned releases you can contact them on tel: 01705 670 269 or on their web site www.vulcan.co.uk



Stateside More Changes at ViScorp

by Jason Compton



Zone is Online

Harv Laser, moderator and sysop of the AmigaZone, had promised a Web interface for AmigaZone subscribers on Portal for some time. But Portal was uncooperative and shut down operations over the summer. However, CalWeb, which adopted the now twice-orphaned AmigaZone (the Zona originated on PeopleLink in the mid 80s), is thankfully much better. The Amiga Zona, one of the best Amiga-only online services, can now offer virtually all of its features to subscribers through the World Wide Web.

By going to the page <http://amigazone.com>, Zone subscribers can access news and Email, as well as the Zone's own message bases and files. Live chat is also a feature that is hoped to be supported on the Amiga in the near future. Of course, the Amiga Zone's world-wide Telnetsite interface is still available as well.

For more information about visiting the Amiga Zone Web interface page above, or the general information site at <http://www.amigazone.com>

ViScorp's fall from popularity in the Amiga market has been nearly as rapid as their earlier ascendancy. As they have been unable to deliver on their stated goals, the public has become disillusioned and the company has begun to express doubts as to its ability to complete the Amiga acquisition at all.

In the midst of all this, two more resignations have occurred. In early January, CEO Bill Buck and Director of European Operations Raquel Velasco resigned from ViScorp. True to form, ViScorp did not discuss the departures. But Chief Operating Officer Hugh Jencks stated that there is no immediate replacement lined up. In the meantime, Jencks and Chairman Jerry Graenberg will continue to operate the company from ViScorp's Chicago headquarters.

In a related story, ViScorp amended an earlier public statement they made which implied that ViScorp had funded Amiga Technologies operation in bankruptcy. That funding came from an entity called "Valeasco GmbH", which ViScorp says they plan to purchase. It is not a stretch to infer that this "Valeasco" is indeed Raquel Velasco, and that the

above resignations are in some way linked to this upcoming acquisition.

Like any company, ViScorp has its share of difficulties with former employees. There is now a good handful of lawsuits and counter suits involving ViScorp and former employees. The longest running saga which ViScorp won but is now in appeal, involved Nolan Bushnell, founder of Atari and one-time CEO of ViScorp. Presently, no fewer than four employees who left the company in 1985 are engaged in lawsuits with ViScorp. ViScorp has obtained a preliminary injunction against Interactive Video Publishing for issues of intellectual property theft, and IVP is made up of three of these former ViScorpians. In addition,

an IVP principal and yet another former employee have filed a breach of contract suit against the company.

In their year-end filing with the SEC (Securities and Exchange Commission, the federal governing body for public companies), ViScorp states that they are now doubtful as to whether or not their initial offer for the Amiga will be completed with Escorn, but that they are still interested in acquiring the Amiga technology "on the open market." In addition, for the first time the issue has been raised as to whether or not ViScorp can continue as a viable going concern, as the company has completed its sixth year without product revenue. ViScorp can be reached at 312-655-0903, <http://www.vistv.com>



Nova Design Gets New Showpiece

To help promote their product line of powerful graphics creation tools on the Amiga, Nova Design of Richmond, Virginia has commissioned a demonstration videotape from Chicago-based video production company The Vantage Point.

The nine-minute tape shows off the features of the popular ImageFX 2.5 image processing

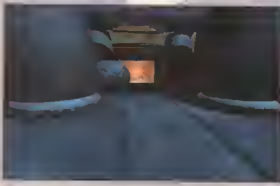
and effects package, as well as the capabilities of previous versions of Aladdin, the 3D software. Nova recently acquired the rights to Nova plans to release V 5.0 of the software, with a new, updated interface, enhanced features, and tight integration with ImageFX imminently.


The videotape was produced at The Vantage Point entirely with

Amiga technology. A Decco Amiga-compatible workstation provided the editing facilities, and was used along with an A2000/040 for the creation of original ImageFX scenes. In addition, professionally produced effects and scenes using ImageFX and Aladdin are showcased on the videotape, including footage from two motion pictures featuring ImageFX production.

Nova Design can be reached at 804-282-1157, www.novadesign.com. The Vantage Point can be reached at 773-465-5158, www.xnet.com/~bohue.

Ⓢ These renders were all created with Aladdin 4.0, a package which is not to be misinterpreted and managed by NovaDesign very soon. Expect a rename in EU Amiga Magazines within a month or two.





Sound Studio

Turn your
Amiga into a
professional

studio

Congratulations. You have made a sound decision, as you are now the owner of the most amazing music package ever written for the Amiga. Let Tony Horgan be your guide as we uncover the many talents of this complete software package.

Teijo Kinnunen's OctaMED SoundStudio is one of a kind – a unique music program that leapfrogs the competition and breaks free of the traditional sonic limits imposed by the Amiga's hardware. Until SoundStudio, Amiga music software could, at best, push out eight poor-quality channels, or alternatively four channels of rather better quality sound. Now all that has changed. Even on a basic A1200 SoundStudio can offer 14-bit output (as opposed to the official maximum 8-bit bandwidth) in realtime with echo affects and even more channels than ever before. Amazingly, on just such a basic Amiga, with SoundStudio it's possible to output CD quality stereo 16-bit music consisting of up to 64 channels, direct to hard drive! Hook up a CD-ROM writer (now available for around £300) and you have all you need to master your very own audio CDs

It's true! Add to that support for a wide range of 16-bit sound cards and at last those old 8-bit limitations are gone forever. Of course it's a doddle to integrate MIDI instruments into your SoundStudio projects too, so the expansion options are limitless.

As you've probably now realised, SoundStudio is the biggest advance in Amiga music software since the first ever tracker was written all those years ago. Over the next few pages we'll cover some of the major features and go into some detail on what they could mean for you.

New order

Let's take a look at the heart of SoundStudio's new box of tricks: the mixing section. SoundStudio differs from OctaMED and other trackers in that it has its own form of 'retargetable audio'. Instead of using the sound chip Paula to manipulate and play all the sounds, the software does the hard work of combining all the tracks as they play, processing them according to any effects you have specified. It does this extremely quickly resulting in a steady stream of sound data, which in effect is a continuous stereo sample. This sound data can then be passed onto your preferred output device which could be the Amiga's sound chip, a 16-bit sound card or even a storage device such as a hard drive or Zip disk. Even if you direct this to the Amiga sound chip, SoundStudio will give you the option to output at 14-bit or 8-bit.

These are a number of other advantages that come from this approach. Traditional trackers are limited to processing samples with the Amiga sound chip, which is unable to play samples in reverse for example. This is now possible (without first making a reversed copy of the samples) so you can set up ping-pong loops on any samples. Other effects can be added during the 'mixing' stage, such as echoes, variable length and depth.

One major factor in the overall sound quality you get from SoundStudio is the mixing rate. This is the sample rate of the mixed sound, so higher mixing rates result in superior fidelity. There's a side effect to this mixing process which can add a little noise to the final output, although this can be countered using the 'smoothing' function from the mixer. Smoothing takes a lot of processing power and so is not recommended on Amigas or on projects that use a lot of channels. However, smoothing should always be used if you are outputting to a hard drive as this will work fine regardless of speed.

14-bit Paula

Once you get the CD edition of CU Amiga month you'll find a large selection of samples and another substantial

section containing 8-bit samples. A smaller collection is also on the cover disks of the floppy disk edition.

Either way, you can mix and match samples from both collections in the same 'songs' without any trouble. In general it's best to work with 16-bit samples, even if you are going to output at 14-bit or even 8-bit, but so long as the samples you have are good and clear they won't be any problems.

If you run the same module through 8-bit and then 14-bit output modes you'll notice that although the 14-bit output is not as loud, it is a lot clearer with less distortion and fuzz in the top end. You might also notice that this 14-bit output is sometimes not as good as you would get from normal four-channel mode. This is the trade off you make for the extra tracks and effects that SoundStudio offers. However, this isn't a significant problem with a 'fast' Amiga, such as one powered by a 50MHz 030 CPU.

Quirks are bound to be uncovered whenever a program pushes a machine to such extremes. One of these quirks is the maximum mix rate that's possible when using the Amiga's sound chip for output. Normally you will be limited to a mix rate of 28kHz, but this is dependent on the screen mode you are running. It sounds bizarre, but if you have a monitor capable of displaying non-video modes (eg Multiscan) then you can switch to one of these alternative modes and you'll be able to use a higher mix rate. In

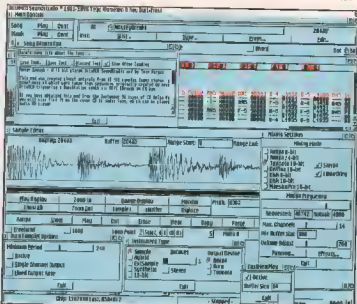
this case the highest rate will depend on your CPU power.

Direct to disk

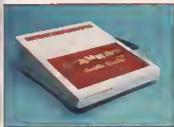
On slower Amigas, such as 68000 and 68020 machines it's not practical to play loads of channels in real time and expect top sound quality. However, there's a very simple way to use as many channels as you like and still get excellent sound quality regardless of the speed of your Amiga.

The secret is to use the direct to disk recording features. The basic theory is that you construct a small section (half a block for example) made up of as many channels as you like, then select Disk 8-bit from the Mixing Settings window, with a mix rate somewhere between 16 and 28kHz. Now when you click the Play button you'll be asked to specify a destination for the output — in other words enter a filename and say where you want the output to be saved (floppy disk for small sections, hard disk for anything up to an entire song, whatever). Click Stop when the relevant part has been recorded, otherwise it will loop until you fill your destination device. Now you can clear the current song and re-load the sample you just made, which will now only use a single channel, or two if you output a stereo file. You can then use standard four-channel mode if you prefer the slightly clearer sound quality.

Working this way you can use as many channels as you like on even a basic A500 Plus with no hard drive. So whatever machine you have, SoundStudio is a boon



▲ SoundStudio is highly configurable. In the screen shot here a very high monitoring frequency has been selected in order to have as many windows and control knobs visible as possible. You can set up any screen mode you like to suit your own system.



▲ With the new mixing and disk recording options you can now take more advantage of Amiga's single channel 16-bit output.

Sound cards

Why Commodore never upgraded the Amiga's 8-bit sound is a mystery to us all, but there have been a number of 16-bit sound cards released by third parties, many of which are compatible with SoundStudio. You can choose from Toccata, Delfina or Maestro cards to act as a 16-bit output. These are all Zorro cards, and so are only available to users of big-box Amigas. You can select any of these as output options from the main Mixing Options window, selected from the Settings menu. A1200 and A600 users can take advantage of the support for the Aura PCMCIA sampler.

You can't select Aura as an output device from the mixing options, but you can assign individual samples to play through Aura (from the instrument type selector). One way to get the most from the Aura features is to record parts of your song to disk as 16-bit samples and then play these through Aura, re-using the rest of your channels for new samples. Setting up the program for maximum quality Aura output quality can be tricky. You need to try different settings of the Minimum Period slider (accessed from the Aura Sampler option of the

Settings menu) to determine the highest output rate possible on your machine. Lower period settings equate to higher output rates. You'll know it you set too high a rate because the software will lock up temporarily. Samples can also be assigned to output through a Toccata card, although in this case you can only replay samples at a small range of pre-set pitches due to limitations of the Toccata hardware.

Virtual mixer

Fine tuning of your mix is essential if you want it to sound professional and polished. SoundStudio has a few control windows which when combined add up to a powerful virtual mixing desk. First of all there's the channel volume control section. Accessed from the Song menu, this is used to set the relative volumes of each channel along with the overall output volume. The master volume should always be set to maximum for optimum sound quality, unless you're doing a manual fade in or fade out of the whole song.

The Mixing Settings window leads off to the other two remaining parts of the virtual mixer. The first of these is the panning controller. This works in a similar way to the volume control, but this time each channel has a horizontal slider to define its position in the stereo image. The Sum of Balances reading at the top gives you a rough guide to how well your overall song is balanced by displaying the average panning value

of all the channels. Finally there's the Effects control panel. This deals with the realtime effects processing, currently consisting of two types of echoes (maybe more effects will be added in the future). The standard echo will add an echo to the whole song. Cross echo adds a stereo ping-pong type of echo effect. You can alter the space between the echoes by altering the Echo Rate value, and the volume of the echoes themselves can be changed from the Echo Depth slider. These echoes are applied to all tracks.

Octamed SoundStudio 01.00 - Song: <unnamed>

Mix - Track Panning

Sum of Balances:	11
B	0
9	-3
A	-2
B	15
C	3
D	-3
E	0
F	0

Up Down Exit

Max. Channels 1
Mix Buffer Size 256
Volume Adjust 256
Panning... Effects... Exit

Relative Track Volumes

B 9 A B C D E F Master

64 64 64 21 64 12 64 64 64

Exit

Mix - Effects

Echo: Cross Echo
Echo Rate (ms) 150
Echo Depth (%) 56.8
Stereo Separation: 0
Exit

▲ Here you can see how the main window that makes up the 'virtual mixing desk'. At the top left is the Track Panning section, in which each track can be given its own position in the stereo image, while the Relative Volume panel works in a similar way to set the volumes. Mix Effects controls the optional echo effects which are applied to all tracks.

Master your own CDs

It's never been easier or cheaper to cut your own audio CDs. SoundStudio outs through a mess of expensive and long-winded processes allowing you to create stereo 16-bit audio files at 44.1kHz without the need for any external equipment at all. These files can then be used directly to cut audio CDs using a CD-ROM writer and some suitable software. That's got to be the ultimate digital mastering system, no mixers, no digital-analogue-digital conversions, and you end up with a perfect recording that can be replayed on any domestic CD player. And yes, you can do this with any Amiga (expect a 1.3 machine), even if it has no 16-bit sound card.

How it works

This is all possible thanks to the 'mixing' stage in which SoundStudio prepares its final sound data to be sent to a specified destination. As was explained earlier, this is a stream of sound sample data. When this is passed to the Amiga sound chip or a 16-bit card, it's turned into sound that you can hear. When it's passed to a file on a disk, it's written as one long sound sample file. Music is stored on audio CDs in pretty much the same way, so in effect you dump the music to your hard disk or any other storage device, then copy it to the CD using special CD writing

software (a number of CD writing software packages are available in shareware and commercial form).

It makes no difference whether you have a sound card or not, because the data is sent straight to your specified hard drive destination. The speed of your Amiga is also irrelevant in this case. Normally a slow Amiga wouldn't be able to output at 44.1kHz as the CPU wouldn't be able to keep up. However, when you're writing a file on disk, SoundStudio has built-in time correction so to account for different CPU data transfer rates. So even though it might take 20 minutes to write a complex module that lasted five minutes when played in real time, the resulting file on the hard drive would play back at exactly the right speed when put onto an audio CD.

CD writers

Until very recently, the idea of adding a CD writer to an Amiga would have been reserved for the affluent minority. That's all changed now, as for one reason or another, over the last year prices of CD writers have been plummeted. It's now possible to pick up an internal CD writer drive for around £300 and you can take your pick from a range of CD writing software too. CD writers look just like normal CD-ROM drives. They can read CD-ROMs but of course they can also write them. These drives use a special type of blank CD which can be

written to once only. You can't go back and delete or copy over anything once you've 'burned' a blank CD. These blanks cost anything from £5 to £20 each, depending on how many you buy, the brand, and where you get them from. Blank CDs are very temperamental things and have a tendency to 'blow out' during the writing process if they're not happy. It's vital that a blank is clean and free of dust when it's put into the CD writer. Even if dirt doesn't stop it blowing out during burning, it will deflect the laser as it writes, leading to a bad master that probably won't work.

Don't forget

Bearing in mind that blank CDs aren't cheap and their fussy nature, it's important that you have everything set up properly before you start to write one. You can't abort half way through and have another go on the same CD - if you stop a CD writing in mid-flow it will be rendered useless. When running out your hard disk file from SoundStudio, make sure you select the correct file format (check with your CD writing software for formats it can deal with). Also make sure you have the mix rate set to 44.1kHz and that you output a stereo file. If you have the mix rate incorrectly set, the track will play back at the wrong speed or not at all.

Another point to keep in mind is the volume adjustment setting. This is found in the mix settings section and allows you to alter the 'scaling' of the channels to get the best output volume level. In other words, it's like an overall volume control. If you set it too high the sound will be distorted where the waveform clips. If it's too low then the sound will be quiet, lacking in definition and more inclined to sampling noise, not using the full range of the 16-bit bandwidth. Always turn smoothing on when running out a module to hard disk. When it's played back, either through a 16-bit card or from an audio CD, you might notice that it seems to have less treble content than when you played it in real-time without smoothing. This is indeed the case, but the treble that has gone is treble that shouldn't have been there in the first place. Remember this when setting your relative instrument volume levels and editing samples. You may find it best to balance it so that it sounds slightly treble-heavy when played without smoothing. There are a number of CD writer software packages available and in development for the Amiga. Most are currently undergoing fairly major upgrades at the moment. We'll be taking a close look at some of the best of these very soon.



MIDI sequencing



▲ Not a lot of people seem to realise that OctaMIDI SoundStudio is a very capable MIDI sequencer. Adding MIDI instruments to your sample-based system is incredibly simple and gives your music so much more potential. How about hitting us a lovely BassStation?

There's no reason why your music set-up should start and end with your Amiga. Contrary to popular belief, SoundStudio is ideal for anyone who wants to run a MIDI system from their Amiga. MIDI instruments and Amiga samples can be seamlessly integrated in the same projects.

In fact, if you really want to get the most from your Amiga, a combination of samples and MIDI instruments is definitely the way to go.

To demonstrate this, the first audio track on this month's CD (which actually track 2, track 1 is CD-ROM data) was created with SoundStudio and a modest MIDI system. It can be played on any hi-fi CD player or CD-ROM drive.

CD audio track

Track 2, the first audio track on this month's CD-ROM edition, is called 'Graffiti' and was created by myself using a combination of MIDI instruments and 8-bit Amiga samples, all sequenced and recorded live in a single pass from SoundStudio.

The entire set-up used to make it consisted of the following: an Amiga, Omega Projects Sound Enhancer, MIDI interface, Novation BassStation analogue synth, Cheetah MS6 analogue synth module, Yamaha FX 500 stereo effects processor, Foxtex X-26 cassette multitrack/mixer, DCC 730.

The kit list

All the Amiga samples were passed through the Sound Enhancer, a small unit that boosts bass and treble frequencies. Amiga samples were used for the zappy techno sounds at the very start, the percussion, stabs and stop effects, and the repeating siren type loop.

The BassStation supplied the bassline

while the Cheetah MS6 was used for the synth string chord (you want a whole chord sequence? Maybe next time ...) These were combined with the six-input mixer section of the Foxtex X-26 cassette multitracker (no multi-tracking or recording was done with the X-26 cassette deck). Via the single stereo effects loop of the X-26 mixer, the BassStation, MS6 and two channels of Amiga samples were all processed in varying amounts with the Yamaha FX 500 unit. The channels of Amiga samples containing the bass drum and a few other bits and pieces were left 'dry' with no effects added. Of course SoundStudio is quite capable of driving much bigger studio set-ups than this.

The main output from the mixer was recorded onto Digital Compact Cassette on a DCC 730. This was then transferred

to hard disk via a Toccata 16-bit sampler card and then written to the master CD.

Production notes

Due to demands of having to put a magazine together this month as well as messing around in the studio (and other lame excuses), it was written and then slightly removed in a total of around four to five hours. Not surprisingly there are a few production glitches, so let's take a look at them and see how they occurred.

Getting the relative levels of each sound sent to the effect processor was tricky, especially as the sound returned from the effects box was very strong in a narrow band of high frequencies. This is good for 'topping up' the sound, but too much leads to a hard tinny overtone. During the drop-out section in the middle, the intensity is raised by sending more of the siren-type loop to the effects box. During the live mix I accidentally started twiddling the wrong knob (the Cheetah MS6 channel) which went uncorrected. The result of this is the single note from the MS6 coming through at too high a volume all of a sudden once the track builds up again, which was then rather hastily turned back down again as the mistake became apparent.

Overall equalisation levels seem to be about right according to a couple of tests on different systems. The mix is not helped by the reverb and distortion on the bassline. Although it makes it more moody than just the 'dry' sound from the synth, it also has the effect of making it less clear and defined in its role as a bassline. A general rule of thumb with basslines is not to put them through heavy reverb effects, but then again if it sounds right, go with it. All the echo/distortion effect is useful for adding some space to the overall sound. It goes on quite a bit too - eight minutes is a bit drawn out for home listening but it's designed to be a trancey club track, hence the length and the breakdown to just the beats at the end. So now it's your turn. ■

Expand and deliver

Once you start adding extra kit to your core Amiga system you won't be able to stop. Here's a quick list of some of the main items you could consider, and what they'll do for you.

MIXER. This is essential to combine all your sound sources into a single stereo signal. You can now choose from a wide range of quality small mixers priced between £150 and £200.

MASTER RECORDER. There are a number of options here. The most popular is DAT (starts at around £400), DCC is good for those on a very tight budget (£240).

Sound module. Modern multi-timbral sound modules come packed with all kinds of sounds and usually have their own effects processors built-in. Prices start around £200.

DRUM MACHINE. Not as popular as they used to be since the rise of the sampler and sound modules with built-in drum kits, but a good one will serve you well. Cheaper models available for around £150.

EFFECTS PROCESSOR. Add reverb, echo, distortion, flange and other special effects to your sounds to give them more character and general sheen. Around £200 will get you a good starter model.

CONTROLLER KEYBOARD. Not normally a priority purchase for a small system, but most set-ups will eventually include one of these. Makes no sound but controls other sound modules that have no keyboard. Expect to pay around £200 upwards.

Late High Opening
Wednesday & Thursday
08.30-10.00Open Sunday
11am to 4pm**FIRST**
COMPUTER CENTRE

24 Hour Days £3.99
Next Week Day £5.99
Saturday Delivery £15.00

Delivery to your home or business
SHOWROOM ADDRESS:
FIRST COMPUTER CENTRE,
DEPT. CU UNIT 3, ARMLEY PARK CT,
STANNINGLEY RD, LEEDS, LS12 2AE.

Stunning multi-media
A1200 with 10MB HD
and 1.44MB 5.25" disks
reports £150



Visa
MasterCard



For more info, contact Manager or contact them by
phone, fax or email. We have a range of products and
services to suit your needs. We are open 7 days a week.
Tel: 0113 231-9444 Fax: 0113 231-9445

OPEN 7 DAYS A WEEK

Fax: 0113 231-9445

Hardware

Amiga A1200 MagicPack
Includes: Windows VBE, Demos,
Original Tutorial, 3 Personal
Files, 1.44MB 5.25" Disk,
Printed Plans & Manual

Very Limited Stocks
Available, Early
Purchase Recommended



£379.99

Amiga A1200 MagicPack
Inc. 170MB HD
& Scala MM300
Includes: Windows VBE, Demos,
Original Tutorial, 3 Personal
Files, 1.44MB 5.25" Disk,
Printed Plans & Manual

£479.99

AMIGA M1438S Monitor Only!! £259.99 When bought with a computer

First Starter Pack
• A1200 disk only
• 10 x 5.25" disk + labels All for only
• Top quality paper
• Deluxe mouse mat
• 1 x A1200 games

PRIMA
• High Quality 200 Watt PSU
• Colour Co-ordinated casing
• 4 x The Power of 2nd Amiga PSU
• 3 Month Warranty

The PrimaATOM PSU
Heavy Duty PSU £69.99

CD ROM Drives/Video CD

Ultra CD ROM Drives
6 X £189.99
10 X £199.99
16 X £229.99
Kit No Drive £119.99

Quick & Easy to install, fits via the lower IDE Connector, does not interfere with existing H.D.

Amiga Technologies Q-Drive CD/ROM
New!
4X Speed Only **£149.99**

PRIMA External SCSI CD ROM Drives
DualPort SCSI CD ROM £139.99
• QuadPort SCSI CD ROM £199.99
• Internal SCSI CD ROM £179.99
• Fast SCSI Transfer Rates
• 12 Pin SCSI Connector
• A SCSI Connector is required to connect Disk

Internal SCSI CD ROM Drives
Sanyo 354V 4x speed £89.99
Toshiba 354V 4x speed £121.99
Toshiba 354V 4x speed £149.99

SCSI Controllers
GVF408B / Ovation SCSI £29.99
GVF408B / Ovation SCSI £29.99
GVF408B / Ovation SCSI £29.99
GVF408B / Ovation SCSI £29.99

Hard Drives

3.5" Hard Disk Drives IDE SCSI
540MB £117.99 270MB £99.99
650MB £133.99 540MB £109.99
1.0GB £149.99 1.0GB £129.99
2.1 Gb £227.99 2.1 Gb £199.99

Build Your Own SCSI Hard Drive
• SCSI case with built in PSU £49.99
• SCSI Hard Drive, 100MB, 200MB, 540MB, 1.0GB, 2.1GB
• SCSI Scsiport Interface £45.00
• 12 Month Warranty

2.5" Hard Drives for A4001 A1200 with Installation kit
Inc. software, screws, cables and instructions

Seagate ST506 200MB £69.99
80MB £64.99 120MB £69.99
170MB £85.99 250MB £109.99
400MB £129.99 540MB £139.99
800MB £149.99 1.0GB £159.99

Monitors

AMIGA New Amiga Monitors
Multi-Sync Monitors
14" £148.99 £129.99
14" £148.99 £129.99
17" £179.99 £159.99
17" £179.99 £159.99

Disk Drives

Amiga External drive £44.99
Amiga 1.76Mb drive £69.99
A1200/600 internal drive £39.99
A500/500 internal drive £39.99

Squirrel I/face

Surf Squirrel
• A hot serial port
• 4x speed
• 12 pin SCSI connector
• 12 pin SCSI connector
• 12 pin SCSI connector
• 12 pin SCSI connector

supraFAXmodem Modems

Sportster Voice
£14.99 (Dial 14.4K Fax)
£5.99
£14.99 (Dial 14.4K Fax)
£16.99
• 1 x Class 1 Fax
• 1 x Class 2 Fax
• Fax on Demand & Call Display

PRIMA V34+ Fax Modem
Amazing Performance
• 33.6 Kbaud Rate Class 1 Fax
• S.A.B.T. & CE approved
Only...£119.99
Complete with cables & Amiga Hardware Software

Amiga SurfWare software pack
The Amiga software suite for all your Amiga needs.
• Amiga Software & Hardware
• Amiga Software & Hardware
• Amiga Software & Hardware

Bar gains
V312B 14.4 Fax Modem £49.99
V312B 14.4 Fax Modem £49.99
V312B 14.4 Fax Modem £49.99
V312B 14.4 Fax Modem £49.99

GP Fax Software only £44.99
Full Series and Receive Fax Software for Amiga
Compatible with a FaxBoard Plus

Modem Accessories
Phone Line Extension Cable...£10.99
15M, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260, 270, 280, 290, 300, 310, 320, 330, 340, 350, 360, 370, 380, 390, 400, 410, 420, 430, 440, 450, 460, 470, 480, 490, 500, 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640, 650, 660, 670, 680, 690, 700, 710, 720, 730, 740, 750, 760, 770, 780, 790, 800, 810, 820, 830, 840, 850, 860, 870, 880, 890, 900, 910, 920, 930, 940, 950, 960, 970, 980, 990, 1000, 1010, 1020, 1030, 1040, 1050, 1060, 1070, 1080, 1090, 1100, 1110, 1120, 1130, 1140, 1150, 1160, 1170, 1180, 1190, 1200, 1210, 1220, 1230, 1240, 1250, 1260, 1270, 1280, 1290, 1300, 1310, 1320, 1330, 1340, 1350, 1360, 1370, 1380, 1390, 1400, 1410, 1420, 1430, 1440, 1450, 1460, 1470, 1480, 1490, 1500, 1510, 1520, 1530, 1540, 1550, 1560, 1570, 1580, 1590, 1600, 1610, 1620, 1630, 1640, 1650, 1660, 1670, 1680, 1690, 1700, 1710, 1720, 1730, 1740, 1750, 1760, 1770, 1780, 1790, 1800, 1810, 1820, 1830, 1840, 1850, 1860, 1870, 1880, 1890, 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1980, 1990, 2000, 2010, 2020, 2030, 2040, 2050, 2060, 2070, 2080, 2090, 2100, 2110, 2120, 2130, 2140, 2150, 2160, 2170, 2180, 2190, 2200, 2210, 2220, 2230, 2240, 2250, 2260, 2270, 2280, 2290, 2300, 2310, 2320, 2330, 2340, 2350, 2360, 2370, 2380, 2390, 2400, 2410, 2420, 2430, 2440, 2450, 2460, 2470, 2480, 2490, 2500, 2510, 2520, 2530, 2540, 2550, 2560, 2570, 2580, 2590, 2600, 2610, 2620, 2630, 2640, 2650, 2660, 2670, 2680, 2690, 2700, 2710, 2720, 2730, 2740, 2750, 2760, 2770, 2780, 2790, 2800, 2810, 2820, 2830, 2840, 2850, 2860, 2870, 2880, 2890, 2900, 2910, 2920, 2930, 2940, 2950, 2960, 2970, 2980, 2990, 3000, 3010, 3020, 3030, 3040, 3050, 3060, 3070, 3080, 3090, 3100, 3110, 3120, 3130, 3140, 3150, 3160, 3170, 3180, 3190, 3200, 3210, 3220, 3230, 3240, 3250, 3260, 3270, 3280, 3290, 3300, 3310, 3320, 3330, 3340, 3350, 3360, 3370, 3380, 3390, 3400, 3410, 3420, 3430, 3440, 3450, 3460, 3470, 3480, 3490, 3500, 3510, 3520, 3530, 3540, 3550, 3560, 3570, 3580, 3590, 3600, 3610, 3620, 3630, 3640, 3650, 3660, 3670, 3680, 3690, 3700, 3710, 3720, 3730, 3740, 3750, 3760, 3770, 3780, 3790, 3800, 3810, 3820, 3830, 3840, 3850, 3860, 3870, 3880, 3890, 3900, 3910, 3920, 3930, 3940, 3950, 3960, 3970, 3980, 3990, 4000, 4010, 4020, 4030, 4040, 4050, 4060, 4070, 4080, 4090, 4100, 4110, 4120, 4130, 4140, 4150, 4160, 4170, 4180, 4190, 4200, 4210, 4220, 4230, 4240, 4250, 4260, 4270, 4280, 4290, 4300, 4310, 4320, 4330, 4340, 4350, 4360, 4370, 4380, 4390, 4400, 4410, 4420, 4430, 4440, 4450, 4460, 4470, 4480, 4490, 4500, 4510, 4520, 4530, 4540, 4550, 4560, 4570, 4580, 4590, 4600, 4610, 4620, 4630, 4640, 4650, 4660, 4670, 4680, 4690, 4700, 4710, 4720, 4730, 4740, 4750, 4760, 4770, 4780, 4790, 4800, 4810, 4820, 4830, 4840, 4850, 4860, 4870, 4880, 4890, 4900, 4910, 4920, 4930, 4940, 4950, 4960, 4970, 4980, 4990, 5000, 5010, 5020, 5030, 5040, 5050, 5060, 5070, 5080, 5090, 5100, 5110, 5120, 5130, 5140, 5150, 5160, 5170, 5180, 5190, 5200, 5210, 5220, 5230, 5240, 5250, 5260, 5270, 5280, 5290, 5300, 5310, 5320, 5330, 5340, 5350, 5360, 5370, 5380, 5390, 5400, 5410, 5420, 5430, 5440, 5450, 5460, 5470, 5480, 5490, 5500, 5510, 5520, 5530, 5540, 5550, 5560, 5570, 5580, 5590, 5600, 5610, 5620, 5630, 5640, 5650, 5660, 5670, 5680, 5690, 5700, 5710, 5720, 5730, 5740, 5750, 5760, 5770, 5780, 5790, 5800, 5810, 5820, 5830, 5840, 5850, 5860, 5870, 5880, 5890, 5900, 5910, 5920, 5930, 5940, 5950, 5960, 5970, 5980, 5990, 6000, 6010, 6020, 6030, 6040, 6050, 6060, 6070, 6080, 6090, 6100, 6110, 6120, 6130, 6140, 6150, 6160, 6170, 6180, 6190, 6200, 6210, 6220, 6230, 6240, 6250, 6260, 6270, 6280, 6290, 6300, 6310, 6320, 6330, 6340, 6350, 6360, 6370, 6380, 6390, 6400, 6410, 6420, 6430, 6440, 6450, 6460, 6470, 6480, 6490, 6500, 6510, 6520, 6530, 6540, 6550, 6560, 6570, 6580, 6590, 6600, 6610, 6620, 6630, 6640, 6650, 6660, 6670, 6680, 6690, 6700, 6710, 6720, 6730, 6740, 6750, 6760, 6770, 6780, 6790, 6800, 6810, 6820, 6830, 6840, 6850, 6860, 6870, 6880, 6890, 6900, 6910, 6920, 6930, 6940, 6950, 6960, 6970, 6980, 6990, 7000, 7010, 7020, 7030, 7040, 7050, 7060, 7070, 7080, 7090, 7100, 7110, 7120, 7130, 7140, 7150, 7160, 7170, 7180, 7190, 7200, 7210, 7220, 7230, 7240, 7250, 7260, 7270, 7280, 7290, 7300, 7310, 7320, 7330, 7340, 7350, 7360, 7370, 7380, 7390, 7400, 7410, 7420, 7430, 7440, 7450, 7460, 7470, 7480, 7490, 7500, 7510, 7520, 7530, 7540, 7550, 7560, 7570, 7580, 7590, 7600, 7610, 7620, 7630, 7640, 7650, 7660, 7670, 7680, 7690, 7700, 7710, 7720, 7730, 7740, 7750, 7760, 7770, 7780, 7790, 7800, 7810, 7820, 7830, 7840, 7850, 7860, 7870, 7880, 7890, 7900, 7910, 7920, 7930, 7940, 7950, 7960, 7970, 7980, 7990, 8000, 8010, 8020, 8030, 8040, 8050, 8060, 8070, 8080, 8090, 8100, 8110, 8120, 8130, 8140, 8150, 8160, 8170, 8180, 8190, 8200, 8210, 8220, 8230, 8240, 8250, 8260, 8270, 8280, 8290, 8300, 8310, 8320, 8330, 8340, 8350, 8360, 8370, 8380, 8390, 8400, 8410, 8420, 8430, 8440, 8450, 8460, 8470, 8480, 8490, 8500, 8510, 8520, 8530, 8540, 8550, 8560, 8570, 8580, 8590, 8600, 8610, 8620, 8630, 8640, 8650, 8660, 8670, 8680, 8690, 8700, 8710, 8720, 8730, 8740, 8750, 8760, 8770, 8780, 8790, 8800, 8810, 8820, 8830, 8840, 8850, 8860, 8870, 8880, 8890, 8900, 8910, 8920, 8930, 8940, 8950, 8960, 8970, 8980, 8990, 9000, 9010, 9020, 9030, 9040, 9050, 9060, 9070, 9080, 9090, 9100, 9110, 9120, 9130, 9140, 9150, 9160, 9170, 9180, 9190, 9200, 9210, 9220, 9230, 9240, 9250, 9260, 9270, 9280, 9290, 9300, 9310, 9320, 9330, 9340, 9350, 9360, 9370, 9380, 9390, 9400, 9410, 9420, 9430, 9440, 9450, 9460, 9470, 9480, 9490, 9500, 9510, 9520, 9530, 9540, 9550, 9560, 9570, 9580, 9590, 9600, 9610, 9620, 9630, 9640, 9650, 9660, 9670, 9680, 9690, 9700, 9710, 9720, 9730, 9740, 9750, 9760, 9770, 9780, 9790, 9800, 9810, 9820, 9830, 9840, 9850, 9860, 9870, 9880, 9890, 9900, 9910, 9920, 9930, 9940, 9950, 9960, 9970, 9980, 9990, 10000, 10010, 10020, 10030, 10040, 10050, 10060, 10070, 10080, 10090, 10100, 10110, 10120, 10130, 10140, 10150, 10160, 10170, 10180, 10190, 10200, 10210, 10220, 10230, 10240, 10250, 10260, 10270, 10280, 10290, 10300, 10310, 10320, 10330, 10340, 10350, 10360, 10370, 10380, 10390, 10400, 10410, 10420, 10430, 10440, 10450, 10460, 10470, 10480, 10490, 10500, 10510, 10520, 10530, 10540, 10550, 10560, 10570, 10580, 10590, 10600, 10610, 10620, 10630, 10640, 10650, 10660, 10670, 10680, 10690, 10700, 10710, 10720, 10730, 10740, 10750, 10760, 10770, 10780, 10790, 10800, 10810, 10820, 10830, 10840, 10850, 10860, 10870, 10880, 10890, 10900, 10910, 10920, 10930, 10940, 10950, 10960, 10970, 10980, 10990, 11000, 11010, 11020, 11030, 11040, 11050, 11060, 11070, 11080, 11090, 11100, 11110, 11120, 11130, 11140, 11150, 11160, 11170, 11180, 11190, 11200, 11210, 11220, 11230, 11240, 11250, 11260, 11270, 11280, 11290, 11300, 11310, 11320, 11330, 11340, 11350, 11360, 11370, 11380, 11390, 11400, 11410, 11420, 11430, 11440, 11450, 11460, 11470, 11480, 11490, 11500, 11510, 11520, 11530, 11540, 11550, 11560, 11570, 11580, 11590, 11600, 11610, 11620, 11630, 11640, 11650, 11660, 11670, 11680, 11690, 11700, 11710, 11720, 11730, 11740, 11750, 11760, 11770, 11780, 11790, 11800, 11810, 11820, 11830, 11840, 11850, 11860, 11870, 11880, 11890, 11900, 11910, 11920, 11930, 11940, 11950, 11960, 11970, 11980, 11990, 12000, 12010, 12020, 12030, 12040, 12050, 12060, 12070, 12080, 12090, 12100, 12110, 12120, 12130, 12140, 12150, 12160, 12170, 12180, 12190, 12200, 12210, 12220, 12230, 12240, 12250, 12260, 12270, 12280, 12290, 12300, 12310, 12320, 12330, 12340, 12350, 12360, 12370, 12380, 12390, 12400, 12410, 12420, 12430, 12440, 12450, 12460, 12470, 12480, 12490, 12500, 12510, 12520, 12530, 12540, 12550, 12560, 12570, 12580, 12590, 12600, 12610, 12620, 12630, 12640, 12650, 12660, 12670, 12680, 12690, 12700, 12710, 12720, 12730, 12740, 12750, 12760, 12770, 12780, 12790, 12800, 12810, 12820, 12830, 12840, 12850, 12860, 12870, 12880, 12890, 12900, 12910, 12920, 12930, 12940, 12950, 12960, 12970, 12980, 12990, 13000, 13010, 13020, 13030, 13040, 13050, 13060, 13070, 13080, 13090, 13100, 13110, 13120, 13130, 13140, 13150, 13160, 13170, 13180, 13190, 13200, 13210, 13220, 13230, 13240, 13250, 13260, 13270, 13280, 13290, 13300, 13310, 13320, 13330, 13340, 13350, 13360, 13370, 13380, 13390, 13400, 13410, 13420, 13430, 13440, 13450, 13460, 13470, 13480, 13490, 13500, 13510, 13520, 13530, 13540, 13550, 13560, 13570, 13580, 13590, 13600, 13610, 13620, 13630, 13640, 13650, 13660, 13670, 13680, 13690, 13700, 13710, 13720, 13730, 13740, 13750, 13760, 13770, 13780, 13790, 13800, 13810, 13820, 13830, 13840, 13850, 13860, 13870, 13880, 13890, 13900, 13910, 13920, 13

Printers: Problem Solved!

At CU Amiga Magazine we get more enquiries on printers than any other subject. Which should I buy? Why doesn't it work? Can I get a driver for this? Printer guru Larry Hickmott is here with all the facts.

If I had to name one thing people do with computers that is sure to give them gray hairs, it would be printing. I know from experience, because I've now got as many gray hairs as a certain well known ex football manager by the name of Kevin Keegan! This aging process can be avoided by putting in a little homework, such as reading CU Amiga Magazine! I think we all know that a printer is one of the first 'extras' that computer users buy for their machine, but do you really know much about what makes it all tick?

Possibly not, because in this era of plug and play, what most people want is to take the printer home, plug it in and then start printing. Not only that, from the letters I get, it seems most people expect perfect results from the time they hit the print button. Unfortunately, printer technology doesn't work like that on the Amiga — yet.

When it comes to using a printer on your Amiga you need to understand not only how your Amiga works with a printer, but also how the printer itself operates. Only today yet another letter popped through my letter box from an Amiga user telling me in the best soap opera tradition, how pages don't print in the right place on the paper and how they can't get their printer to fill the paper.

Such questions shouldn't need to be asked once you've read this article to understand more about your machine. For him, and all you other printer users out there over the next few pages, I'll tell you what you need to know to solve



A If you want to make sure the elements on your page print in the right place on paper, then you need to send the correct hardware messages for your printer into the Print Area gadgets in Print Windows, also called Print Borders in Hardward.

some fundamental problems and lots more besides, but first, a look at the different categories of printers that are available

Just your type

Like people, not all printers are made the same. You have different categories of printers as well as different types within each category.

Take ink-jets. Not all ink-jets are the same because you have ones that print in colour and monochrome, others that only print in monochrome, high resolution models, A4 and A3 formats and the list goes on. No wonder people start pulling their hair (only the grey ones of course) out at the wide array of choices there are these days.

Dot matrix

Dot matrix printers also known as impact printers and pin printers. This antiquated technology has limited uses these days because although dot matrix printers are cheap, so are ink-jets and the price advantage the dot matrix printer once had even an inkjet has almost disappeared. Like typewriters, pin printers rely on ribbons to make the impression on the page but colour ribbons quickly become dirty which means the images they produce are also dirty. This isn't so much of a problem with black and white ones.

Buy one of these printers if you have a specific need for it like producing tractor fed stationery (like labels) or multi-part stationery (like invoices) or, like me, you're really strapped for cash (but the sob stories - Ed)

Ink-jet

If however, you want a printer for day-to-day use then the ink jet printer is the ideal buy. Whether it's producing colour coded invoices that bring a smile to an accountant's face or CD covers that look like they've been done on a printing press, the ink-jet is certainly a versatile machine. And with new models capable of 1440 dpi just quipped by Epson, new slides are being made to create the perfect printer.

Laser printers

In recent years though, the price of a top quality laser has slowly crept downwards, affecting ink-jet sales in the process. These days, lasers are affordable for most computer owners, not just 'well to do' Amiga people.

The only drawback in buying a laser is that the output is monochrome, but if it's lots of copies you want, then a LaserJet is a must.

Applications for a laser are more limited than those for ink-jets but if you're into

DTP, then you'll probably have a very good reason for splashing out on one.

Other types

As well as the three main types of printers listed above, there are others which are useful for specialist types of work. The main ones that spring to mind are the thermal wax and solid ink type printers, like the Star SJ-144 and Citizen PRINTIVA 600C. These are not printers that should be chosen for day to day work like printing letters, due to their higher running costs.

These are more suited for doing T-Shirts and printing on objects that other types of printers won't touch. The PRINTIVA 600C, for example, is very useful when printing on surfaces a wet ink printer won't, like glossy card and some art papers. The PRINTIVA can also print



using metallic colours, something you can't do with your garden variety ink-jet.

Another type of printer that gets a mention from time to time is the dye sublimation printer, great for producing photographic work but little else. If I was to pick one area where the dye sub printer does have a place for Amiga owners, it's in photography especially for the serious amateur or professional who wants to take advantage of digital processing and produce results close to that achieved on photographic paper.

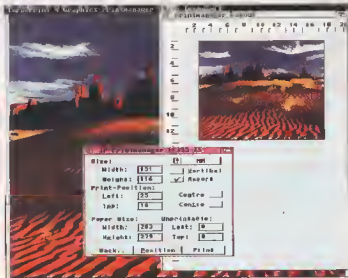
Buying factors

So far we've only touched on the categories of printers there are. Within each category are other sub-divisions which can make life just as difficult when it comes to choosing a printer to sit alongside your Amiga. Take Epson for example. They have just released a load of new Colour Stylus printers that are very good indeed and a significant improvement over previous models.

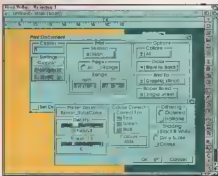
The problem faced by you, the printer buyer, when new models like these are

► Professional Page lets you set up almost both vertically and horizontally and conveniently so you can alter where the image on your page prints on the paper, which for those keeping printers of multiple to print in the right place, is a good feature.

"When it comes to using a printer on your Amiga, you need to understand not only how your Amiga works with a printer, but also how the printer itself operates."



► TurboPrint's Print Manager has been incorporated by the Graphics Publisher in TurboPrint 6 which will allow multiple images on one sheet.



▲ To establish your printer's largest margins, place a coloured bar over the whole page and print it. Some obscure 80 video bits edges and no have your hardware margins, also called Print Services or Print Area.

launched, is that many suppliers, especially Amiga ones, still have old stock. So do you go for the new model or stick with a tried and trusted one?

The deciding factor will be heavily influenced by available printer drivers. For example, I've already mentioned this super printer from Epson that can output at 1440dpi. Now, at the moment no printer driver on the Amiga supports this resolution, but will do I expect in the near future.

Compatibility

The big question though is whether these new Colour Stylus models will work with existing drivers in packages like TurboPrint and Studio II. In the past, I have found many new models have worked with slightly older drivers: an example being the Stylus 500 worked with the Stylus II driver and Hewlett-Packard's 870 worked with an 850 driver and so on. This is because the printer's command set (PCL, EscP2 and so on) is very much the same.

That doesn't mean the Epson printers will work with existing software though because the significant point about the Epson printers is the increase in resolution which won't be supported for a while. A case of watch this space.

So when given the choice between new and old, use some common sense and if in doubt, go with models you know will work with your Amiga. I'm sure your favourite Amiga magazine will cover these new printers as they come out, letting you know if they work with current software and so on.

In the meantime, here are some

worthwhile points to make a note of.

- High resolution output (720dpi) takes a long time to print because there can be many megabytes of data to send to the printer. Sometimes this process can take many hours when printing landscape pages.

- Printers like the Canon BJC-620 are more economical when it comes to replacing colour inks that have run out because you only replace the colour used. Most others printers have tricolour chambers and if one colour runs out, all three have to be replaced.

- The 800 series printers from Hewlett-Packard are very good for 600 dpi monochrome output but I found fine detailed colour images not as good as those from the 720 dpi printers (Stylus 500 and BJC-620). If choosing a HP model, the current one is the 870Cxi (not the 820 Windows printer).

- A four colour printer which uses a separate black cartridge and a three colour cartridge produces better output than a three colour one (no black cartridge for colour output).

- All new printers require a separate printing enhancement package. Owners of Canon printers can get such a package for free from Canon while Epson and Hewlett-Packard customers will need to pay £49.95 for theirs. Do not bother using standard Workbench drivers, because I haven't seen anything yet that matches the commercial packages for quality and reliability. Skimping on proper software just means you are devaluing your printer and not encouraging developers to create new drivers and so on for Amiga owners. In the end, we all lose by not supporting those supporting us.

- Finally, buy an obscure brand printer to save money and you could end up with a white elephant. Play safe and buy a supported brand name.



▲ Packages like Studio II and TurboPrint are often wrongly described as only being printer drivers when in fact, they provide much more. The very powerful print macros within which help you get more from your printer.

Driving the daisy

There are two parts to getting your printer to work with your Amiga. The first is to get an appropriate cable. For ninety nine percent of people, that means a Centronics parallel cable.

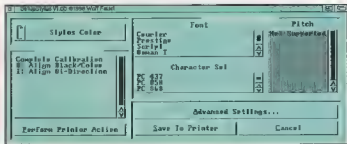
These are the same as you would get for connecting most PCs to a printer and as such, are readily available in PC stores right round the world.

The second thing required is mere complex. It's called a printer driver and what it does is convert the information being output by your Amiga applications into a language understood by your printer. As you can imagine, each printer is going to have a different set of commands it uses to convert the information from a printer into the image on the paper. This is why you need different printer drivers and ones that are up to date, because although an old LaserJet driver may drive a new LaserJet to some extent (because they are both PCL based), it's highly likely the output will be a lot worse than what the printer would produce if used with a decent set of printer drivers. What's the point in spending hundreds of pounds for duff output?

Which leads me to two packages that are a must for every Amiga owner. One is called Studio II Professional (HiSoft 9500 223 669) and the other TurboPrint 5 (Wizard Developments 91322 527 800). These packages do two things. One is they provide the necessary printer driver so that your printer can understand the stuff being output by your Amiga and secondly, they have enhanced preferences programs which are vital to get the best output these modern printers can produce.

This is not a hard and fast rule and varies from printer to printer, but if I was buying a Hewlett-Packard laser (or compatible), I would opt for Studio II Professional, whereas if I was getting a colour ink-jet, like an Epson Stylus, I would go for TurboPrint. There are other points though to take into account. I'm told the Print Manager for TurboPrint 5 (now called the Graphics Publisher) enables you to print more than one image on the page. Studio II Professional meanwhile has direct support for programs like PageStream 3 and ImageFX 2.5, enabling you to improve the output you're likely to get from these applications. My advice is to talk to those selling the program and find out which pack has the features you need.

Neither package is ahead of the game in terms of providing printer drivers for new printers like the Stylus 500 and 800, but you can bet, they will have drivers for these new models soon after the printers' release.



► From this view, you may need to re-calibrate the print heads on a colour Stylus and the sticky that comes with Studio II Professional will let you do that.

Larry's top 10 printers for the Amiga

1. Epson Colour Stylus 500

Although now superseded by the fab but untested on the Amiga Stylus 800, the

Stylus 500 produces superb quality in colour and black and white and is great value. Requires third party drivers like TurboPrint.

better than those from its baby brother, the DeskJet 680, which is getting long in the tooth despite recent improvements

5. LaserJet 5M Plus

This deserves a mention because of its incredibly reliable engine, which keeps churning out prints day after day. A little bit on the pricey side for most Amiga owners, but if you do a lot of DTP, this is the printer

6. Hewlett-Packard LaserJet 5L

Fancy a laser for less than £350? Then the LaserJet 5L is worth a long hard look. It may be ugly and can't be upgraded to PostScript, but the 5L is an ideal entry level machine into the world of lasers

7. Epson Stylus 200

I've seen this for just £117, which makes it exceptional value for a monochrome printer and because you can upgrade it with the addition of an upgrade kit, if you're looking for an entry level printer this may well be it. Don't forget you need a printer driver/enhancement package which adds £50 to the price

8. Citizen PRINTIVA 600C

This gets a special mention because it's almost in a category of its own and so comes top of the class. The PRINTIVA is a solid ink printer for doing T-Shirts, metallic colours and so on. A little expensive to run but because it can print on things normal ink-jets can't, it deserves a mention here



1. The Epson Stylus 500 is probably the best printer for Amiga owners in terms of value and print quality

2. Canon BJC-620

For heavy duty colour printing at high resolution, the BJC-620 is very desirable. It has the advantage of letting you replace a single colour when it runs out as well as having a free print enhancement package called CanonStudio

3. Hewlett-Packard LaserJet 5MP

When it comes to lasers, they don't come much better than this. Priced at around £700, this PostScript version of the 5 series has many great features. For non-PostScript output, you'll need Studio II Professional or TurboPrint.

4. Hewlett-Packard 870Cxi

A rugged and very fast printer that costs 500 more than the Colour Stylus but scores well because the 600 dpi monochrome output is very good indeed and the quality of colour images is certainly

4. One of the cheapest ink-jets I've ever seen is the Stylus 200, a monochrome printer that can be upgraded to colour with the addition of a colour kit

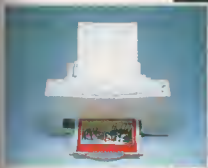
9. Canon BJC-4200

Very popular with Amiga owners is the 4000 series of printers from Canon. The 4200 is the latest and with a price less than £250, it's good value, even if it isn't as good as the mighty 600 series Canons

10. Canon 4550

Gives you the ability to print A3 without you having to mortgage your house. Use it with CanonStudio or if you already have it, Studio II Professional

▼ The Canon BJC-4000 is an A3 capable colour ink-jet that is super value



6. Although a little pricey compared to the Epson Stylus, the Canon BJC-4200 is still a very worthwhile purchase with 720 dpi output and also that can be individually replaced. It also feels more robust and has controls on the front instead of sidebars only



A spot of trouble shooting for your printer

Q How can I lessen the time it takes for my Amiga to finish printing a page?

A Buy an accelerator. In recent tests with an '060 board I found a page with pictures on it that took six minutes from Final Writer on a B6020 Amiga, took only 1 and a half minutes using the '060 board. Printer buffers and a faster printer helps, but the accelerator in your Amiga is what really what counts.

Q My page from the ink-jet has white lines across it.

A Use the printer's clean facility. The nozzle in a print head become clogged for one reason or another, preventing ink from getting to the paper. It could also be a sign your ink is about to run out. Try the clean function first though sometimes the print head just needs a clean!

Q How can I avoid dark lines across the page?

A These are generally (not always) caused by overlapping strips. When your application prints a page, it does so in strips, the less memory you have, the thinner these strips. I have found testing different printers that the occurrence of these overlapping strips usually occurs in cheaper models. It can also vary depending on what printer driver you use and application. So if this is something you have problems with, it maybe worth fiddling with the settings in your print enhancement package or changing printer driver packages should you be able to afford to do so, or lastly, at some stage get a better printer.

Q My page doesn't print in the right place on the paper.

A This is definitely a preferences problem. What you need to do is establish your printer's hardware margins, enter these into the application you are using (this varies from application to application) and then it should print in the right place. Space prevents me from going into great detail on this but having your page set up correctly with your printer preferences helps enormously. This is why I recommend a package like Studio.

But even with that, I found different settings (such as Page Format) were required for different types of printers, never mind different size papers. Experiment using black and white boxes on your page because printing in black and white is fastest. Do your experimenting at the resolution you normally output at. When you have a document that is set up correctly, use it as a template for other documents and make sure you keep a note of all your preferences.

Q I want to print on card but the manual says I can't.

A The manual says that because it is not recommended because if you do and you damage the print head, then you may

invalidate your warranty. However, if you know that you are going to be doing this type of work before you buy a printer, then look for a heavy duty printer that has a near straight paper path. A number of lessers have these, so do some minks like the 600 series Canons (not straight, but fairly close).

The best place to go for information on this subject is the manufacturers' help line. Don't bother mentioning it's for an Amiga because you'll only confuse them but ask which printers do have settings for card or thicker papers. It's also worth finding what damage can occur if used with a particular model so you can better assess the risk.

Q I bought a DeskJet 850 and it mentions in the manual about aligning the print heads. How can I do this?

A TurboPrint has a utility for this. It is a simple enough process but you will need the proper software to do it. Studio II has something similar for the Stylus.

Q I am looking at getting a Hewlett-Packard 870CXi DeskJet. Is there an Amiga printer driver for it?

A Both TurboPrint 4.1 and Studio II drive this using the DJ-850 driver. I am lead to believe TurboPrint 5 has a driver for this model as well.

Q I am looking at buying a laser printer. Should get a PostScript one?

A If you can afford it, certainly I wouldn't buy a laser that did not have PostScript because there are many instances where PostScript output is preferable to that from printer preferences it is, in most cases, quicker too.

Q Why when I want to print only text, does it take so long to print?

A Providing you are printing black text, make sure you have selected black and white in the printer set up function for your application. Printing anything including just text, takes time because an image of the page is created in memory at the resolution you have chosen and then dumped to the printer in strips.

The other alternative is to use a text based word processor like Protext where the text is sent to the printer, not an image of the page as mentioned above. Your main obstacle with Protext is finding a copy as I don't know if anyone is still supporting the Amiga version.

Q Are printers for Macintoshes compatible with Amigas?

A In general, no. It is possible to get some to work with an Amiga but you would be best advised if you have to ask this question, to stick to 'PC' type printers which work fine on Amigas. There are exceptions of course, like GDI printers which need a PC to control them. See the top 10 (page 31) for a list of decent printers to choose from.

Q The latest DeskJets have a photographic mode. Will that mean I can print photographs?

A All inks let you print photographic material. This new photographic six colour print mode where you replace the black cartridge with another colour one, didn't seem to make a lot of difference when used on my Amiga. We may test this in the future with TurboPrint 5.

Q Can you tell me how to get rid of the 'blockiness' that I get when I print my pictures?

A Pixelation or blockiness as you call it, is caused by making a bitmap image to big. To get decent colour images, make sure that you don't enlarge the image when putting it on the page. Lets say you have an image that is 840 pixels wide which on a normal monitor is around 9 inches. When you print it, make it around 5 inches wide on the paper. This is called scaling and what that achieves is that it increases the effective resolution of the image. If though you were having that image printed on a high resolution device for magazine production say, then it maybe advisable to reduce it even further to say 3 inches wide to increase the resolution even more.

Something else you can do is make sure that when you create such images, you have anti-aliasing on. This will help improve the quality but above all, be very careful when scaling bitmap images.

Q How can I use the scalable fonts in my printer for multiple fonts on the one page?

A Unless you have a text based word processor like Protext that has printer drivers that let you select the individual scalable typefaces in your printer, you can't. Some other applications like Wordworth, also have support for this, but Wordworth's support does not seem as comprehensive as Protext's. Printing enhancement packages give you some support too using the fonts in a printer but at the end of the day, if you want to use multiple scalable fonts on a page, you'll need either a package like Protext that can access these fonts or do what most people do, and use the scalable fonts that come with your Amiga or application.

What is generally misunderstood, is that when you use the scalable fonts on a page like PageStream, Wordworth and Final Writer, these fonts are on the Amiga, not in the printer, and the image of the page is generated within the Amiga's memory and output as a graphic to the printer. Programs that use the printer's internal fonts, are working in text mode with no graphics.

I could go on for forever about my favourite subject but I've got to call a halt somewhere. We should have some printer reviews soon, so until then...



Whether you like your action hot on the ground or way up in the air you're well catered for. You've got four flight sims and two racing games to choose from here.

Previews

36 Virtual Karting Deluxe

36 Max Rally

37 Ffigy

Reviews

38 Burnout

42 JETPilot

43 XP8

44 Budget Games

Tips & Guides

46 Vampyra

49 Snip Tips



Max Rally 26



Burnout 38



Vampyra



Snip Tips 49

Screen Scene

Previews

Max Rally

■ Due for release: TBA ■ Publisher: Fortress ■ ☎ 0181 988 8888

For such a simple and technically basic theme, the top-down racing game has proven a surprisingly popular and managed to hold its own even in these days of texture-mapped 3D super consoles. While Skidmarks and Xtreme Racing marked a

move away from the genre, Max Rally is set to bring it right back up to date.

Fortress is the development team behind Max Rally. This is their first commercial game which they plan to publish themselves

and sell through mail-order. So why write another top-down racer when the likes of Overdrive and Roadkill seems to have it covered?

Basically because Fortress wanted to advance the formula further still. To this end, Max Rally takes place over 30 tracks

and across four terrains. Fortress promise features such as four-player link up (definitely a good thing) which will have its own track called 'The Outer Limits' (see screenshots here). You will also get to choose from six different characters and have the ability to alter your vehicle's direction in mid-flight after jumping across a ramp. Usual options such as racing against the clock and computer cars in various championships are also planned.

Max Rally will run on all Amigas with 1.5Mb and should retail at £14.99. It is not far from being finished so we hope to have a review very soon. ■

Merk Forbes



Virtual Karting Deluxe

■ DFR: TBA ■ Publisher: OTM ■ ☎ 01827 312 302

Following on from Virtual Karting, OTM's next racing release from the same Italian author Fabio Bizzetti is Virtual Karting Deluxe. Promising to be more playable than its predecessor (not a tall order) the final release will contain

another six tracks which should be wider and longer than the original and have lots of twists and turns.

The original was a first in terms of the fast 3D graphics, but the handling of the kart and the narrow tracks made it virtually unplayable. The

new version hopes to change all that. Judging from the demo, I'm happy to report that Virtual Karting Deluxe's control method of the kart has been tremendously improved.

Apart from that, much of the original game seems to be there. You can select to play the game in a variety of view points, while at the same time depending on the power of your Amiga, you can select the usual 2x2 or better still, 2x1 graphics resolution which is only available in 3D mode, but provides the player with some tasty visual treats.

Deluxe isn't intended as a direct sequel, more like an enhanced version to keep you interested until Virtual Karting 2 comes out. In the meantime,



you'll have to wait, as the game's nearly finished. We will definitely review Virtual Karting Deluxe as soon as possible. ■

Merk Forbes



Ffigy

■ Due for release: March ■ Publisher: Effigy Software
 ■ 01526 834020

You may remember in an interview with CU Amiga Magazine (December 96 issue), Effigy Software described their vision of the way forward for the Amiga games. Faced with a declining market they decided that dual format CDs offered a good solution. Pinball Prelude was their first foray into that market and Ffigy was planned as the next.

That was a couple of months ago and work has been continuing on the puzzle/adventure game that they describe as a "3D sleepstock extravaganza". Effigy have been busy concentrating on creating the graphics using LightWave for some of the main character's movements.

So where does the sleepstock bit come in? Well, Ffigy is a lovable cutesy character



who when the game is finished will be able to interact with his 3D environment and go through the puzzle/adventure game spreading happiness and general kudos all around him.

These rendered screens look great but we'll have to wait to see how the actual game turns out. It is a long way off being finished still but rest assured we'll be there first when it is. ■

Lisa Collins

Visage

—Computers—

Tel: (0115) 9444500 Fax: (0115) 9444501

25 Bath Street,
 Ilkeston, Derbyshire
 DE7 8AH



Visage

STORAGE

HARD DRIVES

Western Digital

4.0GB	£199.99
8.0GB	£299.99
11.0GB	£399.99
13.0GB	£499.99
15.0GB	£599.99

Seagate

4.0GB	£199.99
8.0GB	£299.99
11.0GB	£399.99
13.0GB	£499.99
15.0GB	£599.99

Quantum

4.0GB	£199.99
8.0GB	£299.99
11.0GB	£399.99
13.0GB	£499.99
15.0GB	£599.99

A500 ALFAPOWER

4.0GB	£199.99
8.0GB	£299.99
11.0GB	£399.99
13.0GB	£499.99
15.0GB	£599.99

IBM / HITACHI 2.5" IDE

4.0GB	£199.99
8.0GB	£299.99
11.0GB	£399.99
13.0GB	£499.99
15.0GB	£599.99

Quantum

4.0GB	£199.99
8.0GB	£299.99
11.0GB	£399.99
13.0GB	£499.99
15.0GB	£599.99

Quantum

4.0GB	£199.99
8.0GB	£299.99
11.0GB	£399.99
13.0GB	£499.99
15.0GB	£599.99

WAIT!

When you first receive your hard drive we think the last thing you want to do is have to format it. All our drives are set up CORRECTLY. We can even configure the drive to your specifications. Drives are formatted & installed with Workbench 3.5VDF, 1280KB of top quality Public Domain software including: Compuserve, Lotus & dBase, Lightwave & Imagine, objects, zip, dummies & music modules, accessories, etc. Games, games and lots more.

WATCH

If you have found a cheaper price elsewhere in the region, we will do our best to meet it.

MEMORY

4GB	£199.99
8GB	£299.99
11GB	£399.99
13GB	£499.99
15GB	£599.99

Quantum

4GB	£199.99
8GB	£299.99
11GB	£399.99
13GB	£499.99
15GB	£599.99

Quantum

4GB	£199.99
8GB	£299.99
11GB	£399.99
13GB	£499.99
15GB	£599.99

Quantum

4GB	£199.99
8GB	£299.99
11GB	£399.99
13GB	£499.99
15GB	£599.99

Quantum

4GB	£199.99
8GB	£299.99
11GB	£399.99
13GB	£499.99
15GB	£599.99

Quantum

4GB	£199.99
8GB	£299.99
11GB	£399.99
13GB	£499.99
15GB	£599.99

Quantum

4GB	£199.99
8GB	£299.99
11GB	£399.99
13GB	£499.99
15GB	£599.99

Quantum

4GB	£199.99
8GB	£299.99
11GB	£399.99
13GB	£499.99
15GB	£599.99

Quantum

4GB	£199.99
8GB	£299.99
11GB	£399.99
13GB	£499.99
15GB	£599.99

Quantum

4GB	£199.99
8GB	£299.99
11GB	£399.99
13GB	£499.99
15GB	£599.99

Quantum

4GB	£199.99
8GB	£299.99
11GB	£399.99
13GB	£499.99
15GB	£599.99

Quantum

4GB	£199.99
8GB	£299.99
11GB	£399.99
13GB	£499.99
15GB	£599.99

Quantum

4GB	£199.99
8GB	£299.99
11GB	£399.99
13GB	£499.99
15GB	£599.99

Quantum

4GB	£199.99
8GB	£299.99
11GB	£399.99
13GB	£499.99
15GB	£599.99

Quantum

4GB	£199.99
8GB	£299.99
11GB	£399.99
13GB	£499.99
15GB	£599.99

Quantum

CALL (0115) 9444500 OR (0115) 9444501
 TO PLACE YOUR ORDER

APOLLO ACCELERATORS

APOLLO 1240/1260

The new Apollo 1240 features a fan cooled super-fast 68040 running at 25MHz. In-built FPU. Battery backed clock and 1 x 72 pin SIMM socket. Making it one of the best value accelerator cards available.

1240/25 0MB	£199.99	1260/50 0MB	£299.99
1240/25 4MB	£219.99	1260/50 4MB	£299.99
1240/25 8MB	£239.99	1260/50 8MB	£319.99
1240/25 16MB	£274.99	1260/50 16MB	£354.99
1240/25 32MB	£329.99	1260/50 32MB	£409.99

APOLLO 1230 LC

The new Apollo 1230 LC features a fan cooled super-fast 68040 running at 25MHz. In-built FPU. Battery backed clock and 1 x 72 pin SIMM socket. Making it one of the best value accelerator cards available.

1230LC 0MB	£199.99
1230LC 4MB	£219.99
1230LC 8MB	£239.99

APOLLO 4040

The new Apollo 4040 features a fan cooled super-fast 68040 running at 25MHz. In-built FPU. Battery backed clock and 1 x 72 pin SIMM socket. Making it one of the best value accelerator cards available.

4040/40MHz	£349.99
4060/50MHz	£369.99

Also available: APOLLO 1230/50MHz



Microware 1402 Multisync Monitor including cables and 25Watt speakers £289.99

New Epson Stylus 500 Colour Inkjet Printer. Prints 720dpi on standard paper £249.99

Special Offers

0% Finance available
 call for details

APOLLO 1240/25

£199.99

SUPER LOW
 SPECIAL OFFER PRICES

1240-4MB...£219.99	1240-8MB...£234.99
1240-16MB...£274.99	1240-32MB...£329.99

SURF THE NET!

28,800 FAX/MODEM

£99.99

33,600 V34 FAX/MODEM

£119.99

INCLUDING CABLES & SOFTWARE

HOW TO ORDER

BY PINT. Please make cheques and Postal Orders payable to "Visage Computers". Please allow 5 Working days for cheques to clear.

WE ACCEPT ALL MAJOR CREDIT CARDS INCLUDING SWITCH & VISA DELTA.

BY PHONE. Credit/Debit card orders taken from 9.00am - 5.30pm Monday to Saturday.

DELIVERY CHARGES NEXT DAY - £6.95

1st
 5th

game's
 intely
 as

Burnout

■ Price: £19.99 ■ Publisher: Vulcan ☎ 01705 670269 ■ <http://www.vulcan.co.uk>

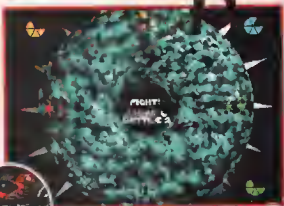
Fans of the film Crash might enjoy this because that's all the cars do in this game. Not a race in sight.

In the ruins of post-apocalypse society inevitably the first instinct of any survivors would be to strap spikes onto their cars and crash into each other at high velocities. Things like rebuilding society, growing food and so on might be more sensible but people have seen too many Sci-Fi movies to escape this fate. So set in 2045, Burnout puts you at the wheels of one of these cars as you bid for fame and fortune in the sporting arenas

Burnout has been generating quite a lot of interest. First of all it is Vulcan Software's first departure away from catering for all Amigas with 1Mb as usual. Burnout is AGA only. Another reason behind the interest is: not only does it have, to quote the advertising, "100% fully rendered in game graphics... six channels of High Definition sound effects... Hires Laced 256 cols @ 25fps Newtonian Mechanics Complex Artificial Intelligence..." etc., it also sounds like Wipeout, the futuristic racer which is making waves on other platforms. But a racing game it isn't.

Crash

Burnout is a demolition derby. You choose your car from a choice of four, and enter the arena (also a choice of four, but

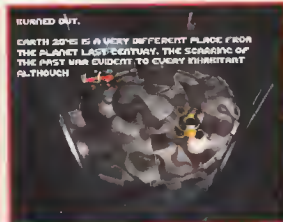


there will be hundreds of home grown arenas in no time) to battle it out with your opponents, which you do by ramming into them until they explode, knocking them off a platform so that they plummet to a distant fate.

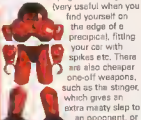
The winner gets the big cash prize, the runners up, miraculously reborn to fight again, get smaller prizes. This can be spent enhancing your car, and therefore your chances in the next battle. You can spend your ill-gotten gains on improving your engine, buying a reverse gear (very useful when you find yourself on the edge of a precipice), fitting your car with spikes etc. There are also cheaper one-off weapons, such as the stinger, which gives an extra masty step to an opponent, or

grey-out, which makes the action disappear into a dense fog while you escape, or more likely blunder off a ledge in the confusion. Also adding to the general confusion there are several bonus games that crop up throughout the game but they don't have any indication of what you are supposed to be doing in them. Your car either shoots forward or stalls. Very strange.

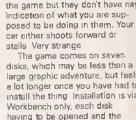
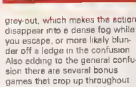
The game comes on seven disks, which may be less than a large graphic adventure, but feels a lot longer once you have had to install the thing. Installation is via Workbench only, each disk having to be opened and the



▲ View view graphics. Fit about the gameplay. The big tyler type view shows here is going to be your home base and perhaps for as long as you can stay at it.



▲ The usual suspects are lined up for your pursuit. It's not too likely looking relative to the game.



▲ Here's your option screen looking all smoky and atmospheric. Tournament or look it hard? Let's see.



A. The mystical portal where all the action takes place *Sentry*

individual files dragged from their floppies into the appropriate folders. After all that, the files have to be unpacked by double clicking on each one. Even if Vulcan hate writing proper installers, a custom AmigaDOS routine could do everything for you about ten times easier and ten times faster. It would have taken little longer to write as it will take every buyer to install the thing. This is very poor.

Piece of art

Once it is up and running, everything begins to look rosy. The Intro graphics are excellent, and the options screens all bode well for the game, offering up to four players via keyboard, joysticks and joystick adapters. Aura Interactor output and cars with wide ranging statistics. Then the game starts and it all goes wrong again. Yes the screens do look gorgeous but they only move a

few pixels up and down and even then they have a tendency to strand you off-screen. The vehicle sprites are all nicely designed fully rendered 3D objects but they lack animation and don't show the effects of damage, indeed the first thing that really tells you your car is damaged is when it vanishes with a pop. No debris or anything like that. As for Newtonian mechanics, I seem to remember notions of equal and opposite reactions – these collisions betray clear evidence of released elastic potential energy which must mean that... hmmm, the cars are made of rubber!

Shareware

There is a lot about Burnout that makes you think Public Domain, Damn fine PD admittedly, but the gameplay just never seems to go anywhere, and amusing as the idea may be, it just doesn't last. There is no real progression in the game, no increase in the difficulty, and very little sense of long term achievement. Even multiplayer action didn't seem fun, and looking at those graphics won't keep you happy for ever.



I hate to sound discouraging, after all releases like this for higher spec. machines are the only way the Amiga games scene has a snowball's chance but that's the way it goes. Pretty AGA graphics just aren't enough. **Andrew Korn**

BURNOUT

workbench version	3.0
number of disks	7
RAM	512K
hard disk only	
graphics	50%
sound	70%
stability	70%
playability	50%
OVERALL	
I really wanted to like this – but didn't	43%

VULCAN SOFTWARE LIMITED IS PROUD TO PRESENT

THE VULCAN SERIES



War has been raging on Alpha IV for the better part of 500 years. The 13 warlord factions had always been enemies, even since the first day of civilization. Occasional wars had been predicted, but never this one.

Think that the brother wars fought over land and glory have ended? No more! It's the most comprehensive war yet. The first warlord fighting for the right to be the first to rule. The first to rule. The first to rule.

But all this fighting has had a price, the warlords' technology is rising. The first to rule is the first to rule. The first to rule is the first to rule. The first to rule is the first to rule.

After successfully locating on Alpha planet in the sub-quantum, your 3D military fight your way through the warlords' most powerful forces. You will win or you will lose. As the warlords fight, the warlords fight. As the warlords fight, the warlords fight.

The people of Earth were finally aware that a war was going on. But, the war was not between the warlords. The war was between the warlords. The war was between the warlords. The war was between the warlords.

The people of Earth were a little more aware than the warlords. But, the war was not between the warlords. The war was between the warlords. The war was between the warlords. The war was between the warlords.



2 weeks and 45 hours of pure strategic warfare in which to defeat the enemy. Whether it's a war or a game, you will win or you will lose. The war is on. The war is on. The war is on. The war is on.

2 weeks and 45 hours of pure strategic warfare in which to defeat the enemy. Whether it's a war or a game, you will win or you will lose. The war is on. The war is on. The war is on. The war is on.

2 weeks and 45 hours of pure strategic warfare in which to defeat the enemy. Whether it's a war or a game, you will win or you will lose. The war is on. The war is on. The war is on. The war is on.

45 Strategic Battles

1 Multi-colored World, Each With 1000s of Units

40+ 2 Player Modes

Extensive Weapon Abilities

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control

Multiple Or Group Control



JETPilot

■ Price: £16.99 ■ Publisher: Vulcan Software ☎ 01705 670393

Yikes! This ain't no game! There are far too many keys and not enough aliens.

They're calling it The Pinnacle of Realistic Flight Simulation. They're in this case are Vulcan Software, the game's publisher, so perhaps that's not so surprising. JETPilot is the first Amiga flight sim to have appeared for some years now. Many would say Amiga flight sims peaked with F-29 Retaliator or the Microprose offerings for those who like a bit more depth. Alas the near mythical TFX has still not appeared and so it seems a logical step that one of the Amiga's most prolific game publishers should rectify the situation. But can it really live up to that bold opening claim?

Need for speed

JETPilot comes with a range of options designed to get it running at a reasonable speed on any Amiga from a basic A500 to a fast D30-based Amiga or better. Even so, 'fast' is not a word that springs to mind however you have the game setup. The game itself is set in the present day and includes aircraft such as the Lightning F1, 3 and 6, MiGs and even the incredible Lockheed F-



104 These are controlled via either an analogue joystick or a combination of mouse and keyboard. The controls are initially hard to get the hang of and committing the various keystrokes and functions to memory also takes a bit of time. However, the good news is that after only a short while you should be going up-diddy-up-up and down-diddy-down-down without too many problems.

If it's pretty graphics and loads of fancy scenery you're after, you're likely to be disappointed. However, if you want a flight sim you can sit in front of with a pot of tea and a tinker with fine tunings and options for hours on end, it's a different story. While the 3D angles leaves a lot to be desired, a lot of work has obviously gone into making the various statistics as realistic as possible (but then I'm not an RAF fighter pilot, so frankly I'm just taking their word for it that all the details are right – do you know the acceleration rate of any of these planes?).

heart-stopping aerial acrobatics and yong-ho blasting action. You have control over just about every option you could think of, so after the atmospheric settings from the time of year, time of day, weather conditions or starting location, or simply muck about with the various camera views, watching from above, below, inside or even from nearby airfields (and in case you're wondering, you're the little black spot!).

Happystick

You've got radio communications (the comical old Amiga voice synth) 27 airfields around Europe to visit, tons of HUD and navigational aids and maps, and the possibility of future data disk expansions.

Compared to the classics mentioned earlier, JETPilot doesn't measure up too well. If you want a new flight sim then by all means take a look, but you may well find deeper, more exciting alternatives in the bargain bins and budget sections (see page 44).

Matt Broughton



Sadstick

You're never up against overwhelming odds, instead choosing from a number of combat options where you can face up to two opponents alone before wingman become obligatory. Of course, if you're a social creature, you'll want to go up against twelve bogies with six CPU churns – if only to utilise the remarkable 'look over your shoulder at your team mates' button.

JETPilot isn't about to win any awards for the most stylish game ever but it should satisfy flight fanatics not so concerned about



A JETPilot is full of statistics, maps and calculations. Screen here is the comparative performance rating at three planes.

JETPILOT	
WORKBENCH	varies 1.3
NUMBER OF DISKS	4
BAM	100%
HARD DISK INSTALLATION	yes
GRAPHICS	50%
CONTROL	50%
INSTABILITY	71%
PLAYABILITY	68%
OVERALL	66%
Detailed flight sim that lacks speed and graphical detail	



Budget Games

MicroProse re-releases from Guildhall Leisure: 01302 890000

A bunch of re-released flight sims come under the gaze of Mark Forbes.

B17 FLYING FORTRESS

Price: £14.99

When B17 was released back in 1992 it scored in the high eighties. Five years on and Amiga flight sims really haven't progressed much further. Now it's on offer again only half the price.

Unlike many of MicroProse's best known flight sims, B17 is not set in the present day, but in World War 2 when pilots had none of the computerised guidance systems and weapons of today. As such, it's a rather different kettle of fish to the likes of Gunship 2000 and F15 Strike Eagle.

Most of the traditional features in B17 are there like bombing from the skies and dogfighting with the enemy air patrols. The 25 missions that must be completed successfully are extremely involving and lend a solid 'meaty' feel to the gameplay, lifting it above a mere shoot 'em up or technical reproduction of an old war plane.

While B17 is a very sophisticated game in terms of detail and depth, it lacks a little speed. Unfortunately further delays come from floppy disk loading and disk swaps - no, it's not that hard disk installable!

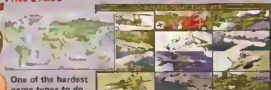
Whilst B17 lacks in whizz-bang gadgets and excitement, it makes up for with its unique character and atmosphere. The clinical computerised world of the modern flight sim can leave the player feeling like something of an observer, while B17 offers plenty for those who like to get lost in a game.



79

DOGFLIGHT

Price: £14.99



One of the hardest game types to do on the Amiga has

got to be the flight sim. The only good ones I can think of that have been memorable were: Combat Air Patrol, F-29 Retaliator, Gunship 2000, Knights of the Sky (please release this one Guildhall), and that's it. Unfortunately, TPX was never released although in my humble opinion it could have been the greatest flight sim of all-time on the Amiga, but that's another story.

Dogflight is not in my list of great flight sims. It's truly awful. I'm not being overly harsh, I never liked it when it was released by MicroProse first time round. From the early beginnings of the loading Dogflight it's easy to see that a lot of effort has been piled into Dogflight's presentation screens and not enough into the main program. It's the classic, nice box, nice manual, shams about the game though!

Once you've seen the impressive title pegs and listened to the jolly war-time music, along with the mission briefing, you'll be fooled into thinking that Dogflight is a great game but it's not. The biggest problem is the graphics and sound. The visuals move very slowly and are annoyingly jerky, and the poor sound effects fail to convey any of the excitement you would expect to experience in a real dog fight.

Even if you ignore the both the graphics and sonics, Dogflight is really badly programmed too. Everything that's tedious and inept about shoot 'em up flight sims can be found in this slow, dull game. Dogflight just crawls along as you try to bank left and right to get your enemy in your sights and try to launch a missile or fire cannon rounds to destroy them.

At the end of the day what we seem to have here is a poor PC to Amiga conversion that has been so badly executed not even die-hard sim fans would want this.

If you're desperate for a high quality sim why not save your money and get Gunship 2000. If you do get Dogflight, just don't expect to be playing it for more than five minutes. I can't say I didn't warn you now can I?



35

30

STARLORD

Price: £14.99

Here's a twist if I ever did see one. Why not make another flight sim but only this time set it in space? Not altogether an original idea, but Elite, Frontier, and Wing Commander managed to do it quite well! StarLord doesn't.

The actual flight-based action is OK but the emphasis is placed more on strategy and having to remember plenty of keyboard controls. However, it has no depth and is boring. A flight sim in space? A combat strategy game in space? It fails both ways unfortunately, as it ends up doing neither at all well. The graphics aren't great by any means and the audio also has a primitive sound to it. The gameplay is muddled and confusing in places and it takes a great deal of effort to get anywhere and to figure out just what's going on.

Starlord is by no means an essential purchase, despite the cheaper price. You'd be better off looking for Frontier or Wing Commander instead.



They seek me here, they seek me there, but if you've got a problem then this is the only place where you'll find the girl that knows all the answers.

Elvira 2 - Jaws of Cerberus

I'm stuck. In fact I'm really stuck. I don't know what I need or even where to start looking for the Freezing Blade Spell, the Bind Demon and the Resurrect Spell. I also need help to get rid of the Vampire at the top of the house.

David Jorge, Portugal.

The Ingredients for the Freezing Blade Spell are: the pea and knife from the meat locker. Use this along with the Bless Spell on the dagger from the second level and you'll have a very powerful weapon. The Bind Demon Spell requires the rope from the bottom of the lake in the Spider Cave.

The Resurrect Spell is used at the end of the game and for that you'll need a brain, heart, scalp, eggs and a prayer book.

If you use the tuning fork to shatter the skylight the result will get rid of the Vampires for you. I'm not too sure I should be telling you that bit. I don't want anyone getting ideas. By the way is that a tuning fork in your pocket, or are you just pleased to see me?

Velhalla 3

I've been stuck on level three of this great game for ages but I'm too chicken to ask my mates for help. I have no idea what to do, I

Adventure Helipline

have a silver plate, gethais (no moss), Jun droop, saves nine and a stealth potion.

Richard Smith, Essex.

Well I can certainly move you an from where you are. Go down the stairs from the point where you picked up the silver plate, then go west to a row of four tables and drop the plate on one of them.

Go east as far as you can, down the stairs, then down another set to the east. At the bottom turn west to where you'll see a butterfly. Stand two steps away from it and drink the stealth potion. Now you can creep forward and pick up the butterfly.

Head back to the Bug Cave and drop the butterfly on it to get a crown. Drop the crown on the knob of Ivan the Terrible to get a key which will open a chest containing a New Penny.

Just in case things don't turn out right for you, here's the level code - TOHOT (A bit like me really.)

Space Quest IV

I'm stuck in the time zone on Galaxy Galleria. I've hidden in the Radio Shack store to get past the policemen but I can't get past the one which is waiting at the Monolith Burger store.

I have broken the Astro Chicken machine in the arcade if that helps. I've got lots of stuff, but I need to get back to the time machine. What exactly do I do now?

Paul Littlewood, Norwich.

The only way you could have gotten this far is by walking around the shopping mall dressed in women's clothes. I'm shocked. It appears that what your friends say about you is true after all.

I don't think you've really missed anything, you just need to do a better job of dodging the police at the end of this section.

When you arrive at the mall pick up the ATM card. Go to Sacks

and buy some clothes. Go to Monolith Burgers and get a job there. You can skip the arcade sequence if you want.

After getting money from the job go and put the ATM card into the machine. Also pick up the cigar butt. After failing the ID test go to Sacks and buy some women's clothes. Go back to the ATM machine and withdraw all the money. Go into the software store, look at the discount stuffs and buy the SQ4 hintbook. You have to move things around to see it.

Go to Radio Shack and buy a PocketPal connector. Next, go back to Sacks and go into the dressing room to change back to Roger Wilco. Go into the arcade and wait for the Squad Police to come. Being pursued, move around all of the different areas. Drift around and wait for the Police and come after you. When they do, go down quickly and go back into the arcade.

Read the hintbook to get the first three digits of a code and open the paper (from the nest) to get the second half. Enter the time hopper and type in the code.

Innocent Until Caught

I'm pulling my hair out by the roots trying to find something to reveal the laser beams in the bank. I know I need the bonds from the bank vault, so could you please help me with this frustrating predicament?

Tim Bromley, Macclesfield.

Well to do know that the answer lies with a bag of flour, a mushroom and a fly. Does that help? And from what I can see you have neither of these items, so let's start there.

You get the flour from the sergeant at the police station. See there are some nice policemen, you just need to flutter your eyelashes and speak nicely to them. The mushroom is beside a fence near the hill. You need to do a bit of work to get a

fly. Go to the hot dog stand there you should get a hot dog and then spit your jaw with mayonnaise. Replace the cap on the jar. You can now move towards the fly and use the cap to capture it.

That's all you need to know for now, I'll let you wrestle with these three ingredients in the bank vault to solve the puzzle there.

The Secret of Monkey Island

I'm stuck on Monkey Island. I don't know what to do as I can't get through the creaking door on board the ghost ship without the noise alerting the crew. Please help me?

Mrs F.E. Moulton, Essex.

You obviously need a bit of grease to make things go smoothly and I know just the place to get some.

First find the ghost feather which is lying near some chickens the use it to tickle the foot of the sleeping crew member until he drops his jug of grog. You can now use this grog with the dish in the room with the rats. Once the rats get sloshed you'll be able to pick up some grease which is there. ■

If you've got a little problem with your favourite RPG or adventure game and would like Vamp to help you out, drop a line to: Vampyra, CU Amiga Magazine, Priory Court, 30-32 Farrington Lane, London EC1R 3AU.



FINAL THOUGHT
IF GOD HAD
WANTED US TO
WALK AROUND
NAKED THEN HE
WOULD HAVE
BEEN BORN
THAT WAY

GASTEINER

0181 345 6000

Facsimile 0181 345 6868

18-22 Sterling Way, North Circular Road, Edmonton, London N18 2YZ

**LONDON'S AMIGA
SALES & REPAIR CENTRE**

RAM CARDS

WE CARRY RAM CARDS FOR ALL AMIGA COMPUTERS AT VERY LOW PRICES

AMIGA A500		
1/2MB		£15.99
A500+		
1MB		£19.99
AMIGA A600		
1MB		£19.99
1MB WITH CLOCK		£34.99
AMIGA A1200 RAM CARDS COME WITH CLOCK & FPU SOCKET		
0MB		£29.99
1MB		£39.99
2MB		£44.99
4MB		£54.99
8MB		£79.99

BLIZZARD 1230 IV

0MB	£149
4MB	£169
8MB	£189
16MB	£209
32MB	£259

FPU

33MHz pbc	£10
50MHz pga	£50
crystals	£5.00

MEMORY SIMMS

All Gasteiner's have extensive & memory for ram cards & accelerators made for Amiga computers A500, A500, A3000, A1500, A2000, A3000

30PIN SIMMS		
1MB	£10	
4MB	£25	
72PIN SIMMS		
2MB	£9	
4MB	£15	
8MB	£22	
16MB	£65	
32MB	£119	

SCANNERS

	EX VAT	INC VAT
BT 5000 EPSON	£350.00	£411.25
BT 6500 EPSON	£700.00	£822.50
BT 9000 EPSON	£800.00	£970.00

ARTEC 600DPI

FLATBED SCANNER

with amiga software
£269.00 BEST BUY

HARD DRIVES

WE SELL HARD DRIVE FOR ALL AMIGA COMPUTERS. WE HAVE SCSI OR IDE HARD DRIVE TO FIT AMIGA A500, A600, A1500, A2000, A3000 & A4000 WHATEVER CONTROLLER YOU MAY HAVE? IF IN ANY DOUBT PHONE OUR TECHNICAL PEOPLE

SCSI

FASTEST DRIVES

	EX VAT	INC VAT
290MB INT SCSI	£50.00	£58.75
730MB INT SCSI	£99.00	£116.33
1.2GB INT SCSI	£159.00	£186.83
2.0GB INT SCSI	£285.00	£334.88
4.0GB INT SCSI	£900.00	£1070.00
730MB EXT SCSI	£130.00	£152.75
1.2MB EXT SCSI	£219.00	£257.33
2MB EXT SCSI	£300.00	£352.50
4MB EXT SCSI	£650.00	£763.75
8MB EXT SCSI	£999.00	£1173.83

IDE 3.5"

BEST BUYS

420MB	£99
650MB	£129
1.3GB	£149
1.7GB	£169
2.5GB	£199
3.2GB	£249

IDE 2.5"

SUPER SMALL HARD DRIVES

170MB	£89
340MB	£89
520MB/540MB	£129
810MB	£159
1GB	£199
1.3GB	£259
2GB	£369

FAX & MODEM

NEW 33.6 WITH CABLES FOR ALL

AMIGA **£69.00**

CD ROM & WRITERS

	EX VAT	INC VAT
CD ROM		
4 SPEED	£100.00	£117.50
2SPEED	£78.00	£92.82
8 SPEED	£200.00	£235.00
CD WRITERS		
PINNACLE	£549.00	£645.06
RICOH 2 SPEED	£329.00	£385.87
YAMAHA 4 SPEED	£629.00	£699.00

PRINTERS

EPSON 200	£119
EPSON 500	£249
EPSON PRO	£379
HP40	£249
HP870	£379

MONITORS

	INC VAT
MICROWTEC 14" (NEW)	£250
MICROWTEC 15"	£359
MICROWTEC 17"	£469
SHOP BOILED PHILIPS 8633	£119
SAMSUNG 15"	£209
SAMSUNG 21" (NEW)	£1059
SONY 15"	£329.00
SONY 17"	£506.32
GASTEINER 15"	£258.50
GASTEINER 17"	£419

BITS & BOBS

ZIP DRIVES	£149
JAZZ DRIVES	£420
SQUIREL	£50
SURF	£89
SMD MPEG	£199
SCSI QKTAGON	£89
MULTIFACE III	£74.99
ALFAQUATRO	£55
IDE CONTROLLER FOR A500, A1500, A2000, A4000	£79

OFFER OF MONTHLY

SyQuest ezflyer 230MB

£199 INC VAT

ZIP, JAZZ & SYQUEST CARTR

ZIP CARTR	£15
EZ135 CARTR	£15
EZ230 CARTR	£23
JAZZ CARTR	£79
SQ 200 CARTR	£59

DELIVERY CHARGES

SMALL CONSUMABLES AND SOFTWARE ITEMS UNDER THE VALUE OF £25 PLEASE ADD £3.50 P&P OTHER ITEMS EXCEPT LASERS. NEXT DAY COURIER SERVICE £10 PER BOX. OFFSHORE AND HIGHLANDS, PLEASE CALL FOR A QUOTATION. IN ADDITION WE OFFER THE FOLLOWING EXPRESS SERVICES: SATURDAY DELIVERY NORMAL RATE PLUS £15 PER BOX. MORNING. NEXT DAY NORMAL RATE PLUS £10 PER BOX. E&G. PRICES ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE. ALL TRADEMARKS ACKNOWLEDGED. TRADERS TERMS & CONDITIONS AVAILABLE UPON REQUEST.

REPAIRS WHILE-U-WAIT!!

COMPUTERS AND MONITORS

That's
a promise
for computers!!

Attention Dealers

Ring/Fax Now for best trade prices
and terms on Repairs, Spares, Floppy
Drives, Hard Drives, CD Rom Drives
and Memory Upgrades.

- FAST TURNAROUND
- 90 DAYS WARRANTY ON ALL REPAIRS!!
- £10 EXTRA CHARGE FOR WHILE-U-WAIT SERVICE
- COURIER CHARGES £7.05 EACH WAY
- A1500/A3000/A3000/A4000... £60 QUOTATION

A500, A500+ & A600

£39.95

A1200

£49.95

Please call
for
PRICE MATCH

MODEMS

BEST APPROVED + NCOM SOFTWARE
14.4k...£59.95 28.8k...£124.95

APOLLO ACCELERATORS

1230 Lite...£99.95
1230/50...£159.95
1240/25...£229.95
1240/40...£299.95
1260/50...£489.95

SIMMS

4Mb...£29.95
8Mb...£49.95
16Mb...£89.95
Note: 2+ simms on SIMM pin can
be bought with an Accelerator

2.5" HARD DRIVES

For A600 & A1200

60Mb...£55.00 120Mb...£75.00 250Mb...£105.00 540Mb...£149.95
80Mb...£65.00 170Mb...£90.00 420Mb...£129.95 1GIG...£199.95

All hard drives are pre-formatted, partitioned with Workbench
loaded and include a 5" IDE cable and software
2.5" IDE Cable and Software (if bought separately)...£9.95

3.5" HARD DRIVES

540Mb...£115.00 1.06GIG...£150.00
850Mb...£130.00 2.1GIG...£235.00

SIMPLY THE BEST AFTER-SALES SERVICE

MEMORY UPGRADES

A500	Upgrade to 1 Mb	A500+	Upgrade to 1 Mb
	£13.95		£19.95
A600	Upgrade to 2 Mb	UNBEATABLE PRICES	
	£19.95	Please call for latest best prices	
A1200	320k	4Mb	8Mb
	£45.00	£75.00	£95.00
	320k, 2MB per Crystal		£29.50

GUARANTEED
SAME DAY DESPATCH
(Subject to availability)

INTERNAL FLOPPY DRIVES

A500/A500+...£29.95 A600/A1200...£34.95

CHIPS * SPARES * ACCESSORIES

1 Meg Fetter Agnus	£19.00	8520 CIA A600/A1200	£14.50
2 Meg Fetter Agnus	£24.00	8374 Alice A1200	£30.00
8342 Denise	£9.00	8364 Paula A600/A1200	£14.50
8373 Super Denise	£18.00	Video DAC A1200	£19.00
£719 Gary	£15.00	A600/A1200 Keyboard	£60.00
8520 CIA A500/A500+	£15.00	Isse A1200	£35.00
8364 Paula A500/A500+	£12.00	Boyle A400/A1200	£25.00
Kickstart ROM 1.3	£15.00	Budgie A1200	£30.00
Kickstart ROM 2.04	£22.00	Mouse (290dpi)	£15.00
Kickstart ROM 2.05	£29.00	SCART lead	£15.00
A500/A500+ Keyboard	£50.00	Mouse Mat	£4.00
6570 Keyboard Chip	£20.00	10 Hand Branded Disks	£6.00
40000 Processor	£8.00	Printer Cable	£6.00
Power Supply A500/A600/A1200	£35.00	Surf Squirrel	£95.00
Exchange A2000/A3000 Power Supply	£80.00	Squirrel SCSI Interface	£55.00

* All chips are available ex-stock
* Please call for any chip or spare not listed here

QUAD SPEED CD ROM DRIVES

Including
Squirrel Interface

£189.95

LOLA GENLOCKS

L1500...£169.95
L2000S...£349.95

**SPECIAL
OFFER**

A1200 without hard drive...£299.95
A1200 with 80Mb hard drive...£349.95
A1200 with 170Mb hard drive...£379.95

A1200 with 340Mb hard drive...£429.95
A1200 with 510Mb hard drive...£499.95
* Call for more good deals

ANALOGIC
ANALOGIC
ANALOGIC

Analogic Computers (UK) Ltd
Unit 6, Ashway Centre, Elm Crescent,
Kingston-upon-Thames, Surrey KT2 6HH

Open Mon-Fri 9:00am-5:30pm, Sat 9:00am-5:00pm Fax: 0181 541 4671

Tel: 0181 546 9575

* All prices include VAT * All prices & specifications subject to change without notice * Road charge for repair does not include disk drive/keyboard
* We reserve the right to refuse any repair * P&P charges £3.50 by Royal Mail or £7.05 for courier * Please allow 5 working days for cheque clearance
* All sales/repairs are only as per our terms and conditions - copy available on request





By Matt Broughton, Games Consultant

Snip Tips



Yee-haw and howdy partners! Things have been mighty quiet on the ranch but thanks to those Ocean Hit Squed-ers, there are at least free games and top tips abound. Er ... right.

HEIMDALL 2

Cors Design

Jonathan 'Jonny' Dral (and isn't that a hilarious nickname!) sent in pages of cheats, but considering most were for games older than the land I'm tremendously old!) I thought I'd just pick out this juicy treat in case folks didn't know it already. Basically, to gain invincibility, combine the runes for Operation and Detection (they look like a 'C' and a 'funny C'). Fairly obviously, it's well worth mucking about with runes to find different effects, and if you die, simply create or buy mana potions, resurrect the player and then take the mana potion.

CAPITAL PUNISHMENT

Click Boom

"Hi I'm Torge Kalsen, and I'm from Norway!" And very nice too. Yes, our chums across the sea have been at it again, and young Torge has just found the secret moves and wants to share them with us. Press the fire button three times and then move the joystick in any direction for a new move or an automatic combination (like kick, lock and punch). The effect will depend on the character in use, so act they do all work and try fire, fire, fire, down with Carben. Pledge for a body roll. Grrr!

DUNGEON MASTER 2

Interplay

I'm indebted to a Mr S Haining of Harlepool, for a rather splendid profit-making tip for the epic RPG



that is Dungeon Master 2. Simply start the game, pick your three heroes and leave via the ladder. Move the table and pick up the gear in the alcove, including the key. Now select your best weapons and use the key on the door. Kill the monsters outside and if you walk around you'll find a shop selling food. Go in and pull the table back and pick up the gear, which should include a key. Go back outside and find the door with the engraving. Use the key and then follow the path around until you reach the entrances to the building. Now turn left and follow the path straight down until you reach a tree (killing an enemy on the way round).

Still facing the tree, take five steps left, watching out for the Beasts and follow the path down and around towards the fog. Pick up the gear from the stone table and go to the edge, picking up all the mana blossoms. Run back to the tree and send your characters to sleep for about two minutes (in real time). Run back to the stone table again and the plants should have grown back. If they haven't, sleep again in a safe place. It's best to save every time you go



▲ There are some secret moves waiting to be discovered in this third thirty best 'em up. And Torge Kalsen from Norway knows what they are and you will too once you've read these tips.

back to the blossoms as you can get magic bolts and lightning hitting you. By repeating this you can build up a healthy stash of mana blossoms which can be taken back to the food shop and sold for tons of gold. You need to watch your food and water levels when doing this, and keep stocking up at the shop of the beasts for the streaks you get (which can also be sold if you have any left over). The easiest way to kill them is to run around them (they're very slow) and you'll also improve your experience this way. Brilliant or what?

PREMIER MANAGER 3

Gremion

Now I know we've had tons of these phone numbers over the years, but I wasn't actually sure if I'd seen this one before, so here

it is for your pleasures. Enter '400040' into the telephone for a team full of Super-Players, each with high fitness, morale and excellent skill on BOTH feet. YIKES! If you put one of these players on the market, everyone will want him, and even better - you can use the number as many times as you want. Nice. ■

THAT'S THAT!

I said it is, but don't fret, we'll be back next month with more game-spelling tip codes and cheats. Of course we can't do this without you, so get writing, and don't forget to let me know what machines you have 'cos there's a free Hit Squid game for any tipsters who get their work printed. Be seeing you ...

OPUS 4.12
WITH £50

MAGNUM

A1200 Expansion Cards

FREE
SOCCER MOUS
WITHIN £19.99
WHILE STOCKS LAST

560DPI
3 BUTTON
MICE & MATS
for all Amiga's & Atari ST's

NEW
FREE AMIGA
DRIVER DISK

AWARD WINNING 5600P RESOLUTION • 50% RATING IN CUI
AMIGA • MICRO SWITCHED BUTTONS • AMIGA/ATARI ST
SWITCHABLE • ALL 3 BUTTONS CAN BE SET WITH MANY
PROGRAMS SUCH AS DIRECTORY OPS 5

BEIGE £12.99 BLACK £14.99
MAT £2.99 on £1 WITH A MOUSE

OVER 35
MIPS OF SPEED
WITH A 68060!

660
POWER

MAGNUM RAMS CARD
SPEED INCREASE OF 2.3 TIMES 2.8MBPS
• AVAILABLE WITH 2, 4 OR 8MB OF 32 BIT
RAM INSTALLED • LINES STANDARD 72-PIN
SHIM • OPTIONAL PLCC TYPE FPU
(FLUATING POINT UNIT) • BATTERY BACKED
CLOCK/CALCULATOR • FINGER OUT/PUT TO HELP
INSTALLATION • TAPPOUT FITTING • DOESN'T
VOID WARRANTY • 1 YEAR WARRANTY
COMPATIBLE (CPU USE WITH MICROLINE,
SQUARREL ETC.) • ZERO WAIT STATE DELAYS

MAGNUM 68030/68040 & 68060 CARDS
SPEED INCREASE OF UP TO 27 TIMES • 68030/40 OR 63
PROCESSOR RUNNING AT 25/40 OR 50MHZ
(NEW PROCESSOR CHIP - NOT DEVELOPED) • MMU IN
ALL PROCESSORS • UP TO 32MB OF RAM CAN BE ADDED
• KODAK REMAPPING • ORIGINAL SCSI-II INTERFACE
• CAN ACCOMMODATE A 72-PIN INDUSTRIAL STANDARD SIMM
• 68040/50 HAVE BUILT IN FPU, 68030 CARD HAS OPTIONAL
PLCC/FPGA TYPE FPU (FLUATING POINT UNIT) • BATTERY
BACKED CLOCK/CALCULATOR • TAPPOUT FITTING • DOESN'T
VOID WARRANTY • 1 YEAR WARRANTY
PRODUCTS SUCH AS DYNADISK HD OR CD/ZIP CARDS
OR SQUARREL • ZERO WAIT STATE DELAYS

LOWEST EVER
PRICES

FREE
OK

	0mb	4mb	8mb	16mb	32mb
RAMS	£49.99	£89.99	£119.99	N/A	N/A
RAMS & 33MHZ FPU	£79.99	£119.99	£149.99	N/A	N/A
68030/25MHZ & FPU	£129.99	£139.99	£169.99	£209.99	£279.99
68030/40MHZ	£129.99	£169.99	£199.99	£239.99	£309.99
68030/40MHZ & FPU	£149.99	£189.99	£219.99	£259.99	£329.99
68030/50MHZ	£169.99	£209.99	£239.99	£279.99	£349.99
68040/25MHZ	£249.99	£289.99	£319.99	£359.99	£429.99
68040/40MHZ	£329.99	£369.99	£399.99	£439.99	£509.99
68060/50MHZ	£499.99	£539.99	£569.99	£609.99	£679.99

SCSI-II Interface for the Magnum 68030/68040 & 68060 Cards - Warranty safe
installer, supplied with software £79.99

SATURN

External Disk Floppy Drive

TURBOPRINT 4.1

Powerful Printout Software

IF YOU HAVE A PRINTER - YOU MUST GET TURBOPRINT 4.1. IT RADICALLY IMPROVES THE PRINTOUTS YOU NORMALLY GET BY REWRITING THE AMIGA PRINTER SYSTEM WITH THE FASTEST AND VISIBLY BETTER TURBOPRINT SYSTEM. OPTIONS INCLUDE POSTER PRINTING, COLOR CORRECTION, DITHERING, COLOR



BALANCE, ON-SCREEN PREVIEW AND MUCH MORE... MOST PRINTERS ARE SUPPORTED - CALL TO CHECK. AMIGA SHOPPER 50%

£49.99

OPUS 4.12
WITH £50

ENTERPRISE

Disk to Disk Backup Software

GP FAX

Fax Software Solution for All Amiga's and a Phone

REPAIRS

by Qualified Technicians

COMPATIBLE
• HIGH DENSITY 5.25" DISK • ROBUST
METAL CASE • AUTO-CLIP AS STANDARD
• ENHANCED DIRTY DISK • LOW POWER
CONSUMPTION • TAPPOUT POINT EXTRA
DEALS **£39.99**

On £59.99 WITH POWERPC/PRO 3 - THE BEST BACKUP SYSTEM

Even Fax DIRECTLY FROM YOUR APPLICATION.
AMIGA FORMAT GOLD
AMIGA COMPATIBLE 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

• ALL AMIGA COMPATIBLE COVERED
• PRICES FROM AS LOW AS £29.99
• MANY REPAIRS BY VAGUO INCLUDE NO PARTS
• PRICES INCLUDE INHOUSE COLLECTION & DELIVERY,
LABOUR, FULL DIAGNOSTICS, SURFACE, SOAK TEST & VAT
• BEST TURNOVER
• ALL TECHNICIANS ARE TRAINED & FULLY QUALIFIED
• UPGRADES URGENT AT SAME TIME FITTED FREE
• 90 DAYS WARRANTY ON ALL REPAIRS
£29.99 + PARTS

QUARTERBACK DISK SUITE

Quarterback 5.1 Quarterback Task Sheet

Send your documents to your Amiga via a phone. Send faxes to and from your Amiga. Even Fax DIRECTLY FROM YOUR APPLICATION.

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

• ALL AMIGA COMPATIBLE COVERED
• PRICES FROM AS LOW AS £29.99
• MANY REPAIRS BY VAGUO INCLUDE NO PARTS
• PRICES INCLUDE INHOUSE COLLECTION & DELIVERY,
LABOUR, FULL DIAGNOSTICS, SURFACE, SOAK TEST & VAT
• BEST TURNOVER
• ALL TECHNICIANS ARE TRAINED & FULLY QUALIFIED
• UPGRADES URGENT AT SAME TIME FITTED FREE
• 90 DAYS WARRANTY ON ALL REPAIRS
£29.99 + PARTS

THE CLASSIC QUARTERBACK 6.1 AND QUARTERBACK TASKS DELIVER ARE BACK ON SALE. CONSIDER IT JUST AS THE DISK BACKUP AND DISK RECOVERY PROGRAMS WE HAVE AVAILABLE FOR A LIMITED PERIOD, THE TWO PACKAGES COMBINED AT AN UNBEATABLE PRICE (NORMALLY £79.99) DISK RECOVERY AND DISK RECOVERY INFORMATION ARE TWO KEY TASKS THAT JUST SHOULDN'T BE LEFT TO INFERIOR PD ALI'S. GET THE QUARTERBACK DISK SUITE **£34.99**

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99

Amiga 500/500+ 5.1/10
FAX COMPATIBLE
MODERN REQUIRED
£44.99



We've gone graphics crazy this month.

There's the wonderful Cybervision 3D and a round-up of shareware packages. Plus lots, lots more.

52 Cybervision 3D

The latest graphics board from phase 5. It's cheap, it's well specified but is it all it's cracked up to be?

54 Graphics round-up

Special feature! We bring you the best of the graphics packages you don't hear about. Freeware or shareware, it's all great software.

58 SMD 100

We test this SCSI CD-ROM add-on from HiSoft which promises to bring MPEG CD-Video to the masses.

60 Quickcam Interface

A clever adapter from Eyeteck allows cheap PC type Quickcams to be connected to an Amiga. Video conferencing takes a step closer.

62 Geek Gadgets

Everything you need to program your Amiga including compilers for dozens of languages.

63 Trackball

Golden Image bring out a new trackball. It's great for playing Missile Command but can it replace a mouse?

64 PD Scene

Our regular round-up of the games and demos scene includes a multiplayer Colonization clone and some AmigaNet gems.

67 PD Utilities

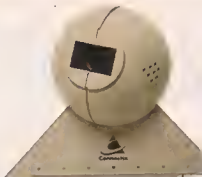
Our regular round-up of the useful and not so useful utilities that turned up this month. From first aid to invoice printing, it's all here.

70 CD-ROM Scene

We take a closer look at two disks from the AmigaNet collection and examine Almathera's DTV CD2.

72 Art Gallery

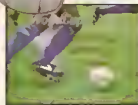
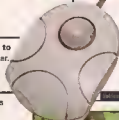
OK, so it isn't all that technical, but after all that serious technical stuff it's nice to look at some glorious graphics.



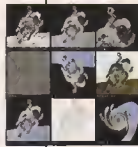
Quickcam 60



Trackball 63



CD-ROM 70



Art Gallery 72

TechScene

CyberVision 3D

■ Price: £219 ■ Developer: Phase 5 Digital Products ■ Supplier: Gordon Harwoods ☎ 01773 836781

Though AGA can still fight with the best of 'em a graphics card like this can do wonders.

If you've the money, deskpace and inclination a big-box Amiga is a wonderful thing. Then Zorro slots enable the addition of third-party hardware that can't be added to the A1200 or at least is very difficult. The prize example is the graphics board.

For an ideal computer display, we want a high resolution coupled with a high refresh rate so that the display is crisp and easy on the eye with no visible flicker. Then, of course, we want lots of colours so that the graphics look great and don't need to be dithered. Lastly, this display should be fast so you're never left waiting around for things to draw. While AGA can cope reasonably though not as well with the former categories (with the use of DBLPal or Multiscan), in the speed stakes it's totally eclipsed by a Zorro graphics board such as the CyberVision 64/3D.

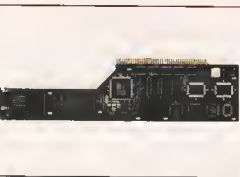
Phase 5's previous Zorro graphics board was the CyberVision 64. It was the best graphics card for Zorro-equipped Amigas. Based on the S3 'Tri84' or the 'Stealth' chipset, internally it's fully 64-bit for blinding performance. The

successor to the CV64, reviewed here, is the CyberVision 64/3D. This card is based on the S3 'VIRGE' chip-set which integrates a 3D engine into much the same sort of design as the CV64. Unlike the Zorro III only CV64, the CV3D is a dual Zorro II and III autosensing card.

Improve on AGA

How do these cards work? When the Zorro card is fitted to a big-box Amiga, it normally presents two video connectors to the rear panel. One of which is connected with a supplied lead to the Amiga's native video output. The other is the video output of the card and is connected to a monitor. The provided RTG software will create brand new screen-modes which appear in AmigaOS's display database. Then all screen mode requests show the new modes.

When an Amiga screen mode is used, the card switches the native Amiga video through. When a new graphics board mode is used, the card's graphics



▲ The mighty CyberVision 3D card itself. Below the cut-out section where the scan-doubler and monitor connector is added.

chip generates the video instead. Here's where the CV3D differs from the rest. As standard it has no video pass-through at all. It requires the addition of a scan-doubler module which has the switcher and a video scan-doubler which means that native 15KHz screen modes will work on a SVGA monitor. That way you could afford a decent 17" display, rather than a 14" multiscan monitor which can handle 15KHz modes as well.

The problem is the scan-doubler module is extra and it wasn't released at the time of review. So every time the screen flicks to a native Amiga screen, there's no video output at all. Since this means games, non-OS-legal software, guru messages or a

messed-up RTG software installation, this is not a good thing. I believe Phase 5 should have included the video switcher as standard with the scan-doubler itself being a plug-in module.

Simple enough

This forthcoming aside, installation is fairly straightforward. The card fits well and the cut-out section near the rear makes it even easier to plug in. Installing the software required some manual niggling of the video lead to insert into the Amiga's video out since my startup-sequence was modified from the norm. For those who used the CyberGraphX RTG software the Installer does a great job of backing up the old files. This needs to be done because the software supplied with the CV3D is the brand-new beta version 3 of CyberGraphX.

With our Amiga 'Microvite' 1764, the standard 64KHz monitor provides a range of useful screen modes. Switching Workbench to the 800 x 600 256 colour mode produces impressive results. The speed is considerably greater than the old GVP Spectrum (also a Zorro III card but with a slower chip-set) which I use from day to day. I was spoilt with the Spectrum before but this is a whole order of performance better. My outrageously textured MJJ GUIs appear faster than vanilla

How fast is fast?

Test	AGA PAL	AGA Prod	GVP Spectrum	Phase 5 CV64	Phase 5 CV3D
Draw Lines	839 (1)	571 (0.8)	16297 (17.4)	50662 (54)	148584 (158)
Draw Circles	1296 (1)	636 (0.46)	42984 (30.6)	144568 (104)	85400 (61)
Score X	21 (1)	14 (0.68)	494 (23)	2464 (117)	2429 (115)
Color Output	240 (1)	166 (0.7)	450 (2)	1334 (5.6)	1900 (8.6)
Areafill	84 (1)	82 (0.98)	348 (3.6)	33884 (380)	48028 (518)
Swap Screens	501 (1)	574 (1.15)	24 (0.05)	83 (0.17)	67 (0.13)

All speed tests from WSpeed by JAMI Software Development running on an A4001 with Cyberstorm 00000 ROMs.

AGA PAL: in Hi Res Interlaced PAL 250 colours

GVP Spectrum: 640 x 512 255 colours

AGA Prod: in Productivity mode 250 colours

Phase 5 CV3D: 640 x 512 255 colours

(Figures in brackets are relative to AGA PAL performance. For example (2) means twice as fast as AGA PAL.)



▲ An example of a 24-bit screen and CGraphX-compatible applications. The Voyager web browser and Openchrome are shown here

Goodbye variations on AGA. What's more, screen changes from one CV3D mode to another were a lot faster without the annoying delay experienced with the spectrum

Buggy software

Unfortunately, there are some problems with the new version of CGraphX. Firstly, Final Writer hangs the machine when I try to open on a CV3D screen. Not good. Despite numerous updates to the latest version before going to press this is still the case. For one of the major applications on the Amiga, this is unacceptable.

Firing up the Voyager Web browser on a 15-bit screen (65K odd colours) good compromise between speed and colours) presents a blank display. Damn. Time to have a play in the CGXMode screen editor. This program allows editing and creation of brand new screen modes of differing resolutions, scan rates and colour-depths. Unfortunately it's just as rubbish as the previous version of CGraphX. A small confusing GUI which isn't a patch on even the ancient EGS screen-mode editor and certainly not PicassoMode or Picasso96Mode.

After a few hours playing in CGXMode, I realise that it isn't possible to open an 800 x 600 16-bit screen. This doesn't make sense since I could open a lower resolution 16-bit screen. I could even make a 24-bit screen but no 16-bit. OK since the card is so fast, I'll deal with a 24-bit screen. The default 24-bit 800 x 600 display has a silly 48Hz flickery display so I deleted it and duplicated the 8-bit 70Hz mode and cycled

the depth gadget to 24-bit.

Press test and it works great. Saving this out and rebooting there's no 800 x 600 24-bit screen mode. Checking CGXMode again, there it is but it's not appearing in the display database. Phase 5 are unhelpful but I find out from another CV3D user that I should delete some unused modes. Bang, the 800 x 600 24-bit screen appears. Hallelujah, all is not lost. I would have preferred 16-bit but 24-bit is pretty fast on the CV3D anyway. There's one basic 3D demonstration program that Phase 5 sent me but unfortunately it wants an 800 x 600 15-bit screen which I couldn't get to work. Dam.

The version of the software shipped with the card on floppy disk also exhibits graphical glitches on MUI GUIs and even the CLI scrolling. The latter versions of the software fixed much of this but to date there are still problems. Menus on screens of less than 256 colours are corrupt for example. The RTG seems to mess up the display when reverting to AGA with 32 colours or so. Glitches in the CLI scrolling are still there, sometimes flicking screens needs two attempts and DOpus 4 fails to open a Workbench class. CGraphX representatives reminded me the software was beta. I'm afraid I don't see that as an excuse when it's shipped with a commercial product. Surely the time of

testing has passed? There's very little provided in the way of software utilities on the floppy disk shipped with the CV3D. Certainly nothing to do with 3D at all. One nice utility though is the Osins MPEG player. On my 68060 equipped machine it can play most MPEG files at an acceptable rate which is the first time I've seen this happen on the Amiga with a software decoder. Unfortunately, though it claims to play Video-CDs the software claims that all our Video-CDs are not 'XA mode CDs when I know full well that they are

Unsupported 3D

So what's the 3D about then? Basically CyberGraphX V3 has an implementation of the so-called 'OpenGL' 3D system which means that software supporting this should be able to be ported to the Amiga or at least software coded from scratch to support it. The idea behind CyberGraphX supporting this is that such software should work on any 3D graphics card and not just the CV3D. This idea worked for 2D so it's naturally being applied to 3D though it's early days and there's no real software at all. Don't expect someone to write a Doom clone for it though, it's a gimmick feature which is currently unsupported.

Performance wise the CV3D is a nippy card, comparable to the CV64. Fitted with 4Mb of DRAM as standard it's capable of 24-bit in 1024 x 768 and 16-bit above that. The memory should allow it to do high modes in 24-bit but this limitation is with the VRGE chip-set. Other than the Phase 5's momentary lack of reason in omitting the

monitor switcher, the negative aspects are software related and so liable to improve with future releases just as CGraphX 2.x did.

To sum up the negative points, a CV3D owner finds themselves with buggy RTG software, no video pass-through and no 3D software to support the 3D features. Some 18 months after the CU Amiga 90% rated CV64, I would have expected a faster card with better software for cheaper. Sadly, this isn't it.

The bright side

The bright side is the card is comparatively cheap at £220. However since the monitor switcher is more or less essential at £85, the actual total comes out at slightly more than £300. This is the same price as the CV64 was but you do get a scan doubler into the bargain (providing that works). Unlike the promised but never delivered MPEG decoder for the CV64, we have it on good authority that the CV3D MPEG decoder will appear, though not cheaply, at £175. It's still a top-notch graphics card, well built and the software will no doubt be fixed soon. Taking a leap of faith, the CV3D would serve you well for a long time.

Should you buy a CV3D? While it's a promising graphics card it's not really anything new (apart from the unsupported 3D) or any better value for money. It could be argued that it's a step backwards. You may choose to wait until we review the VillageTronics Picasso IV and its new Picasso96 RTG software in the next issue.

I appreciate Phase 5 have things on their mind but the CV3D package could have been more polished on release. We'll keep you informed of any updates and fixes.

Mat Bettinson



▲ The cryptic though versatile CyberVision screen mode editor. See here on the test pattern generated to check out your screen modes

CYBERVISION 64/3D

system requirements

Any Amiga with a spare Zero slot

100% compatible with many RTG in-transit modes though lagged

Excellent graphics performance but no more switches as standard

40% less glitchy but adds a monitor switcher menu add-on

OVERALL

A promising though flawed miracle card.

81%



Graphics

-the other packages

There are plenty of alternatives to the likes of ImageFX, Vista, Brilliance and Photogenics. And they're cheaper too.

Personal Paint, Art Effect, Photogenics, XPaint, X-Cad Pro 2000, Vista Pro, WCS, Cinema 4D, Imagine, LightWave, Classica, ImageFX

the list goes on. Under supported in many other, the field of graphics is still one in which the Amiga can hold its head up high. These commercial packages have shown their worth time and time again -

and been reviewed time and time again, too. Of course it's necessary to take a look at the latest release of a software package as important as any of these but we thought it was about time we had a look at what else was out there.

The greatest single resource for the Amiga these days is the PD/shareware scene. Sure, shareware isn't usually developed to the degree that a commercial release is, but there are some real masterpieces out there. What's more, the need to produce something which is commercially viable just does not exist for a shareware/freeware writer, there are no advertising costs, no distribution fees,

little or no packaging costs. Which means that as well as packages designed to compete with the ImageFXs of this world, there are weird and wonderful packages that would just never make as a commercial release.

GFXLab24

24-bit image processor

As the name suggests, GFXLab24 is a powerful 24-bit image converter and processor. It can load files by

detype and in formats such as Targa and PNG, currently being touted as the successor to GIF. GFXLab24's output options cover IFF and IFF24, JPEG, PNG and GIF, including transparent GIFs.

With 25 functions to choose from and a real time preview window to see the results of your modifications before they are set in stone, GFXLab24 offers real image manipulation power. Image processing operators include some fairly standard functions such as convert to greyscale, negative and colour filtering, but rather than the simple routines you might expect in a piece of PD, these are often powerful processes that allow you to alter the red, green and blue channels separately, play with contrast, gamma brightness and so on.

GFXLab24 also has a range of operators for producing special effects, such as emboss, sketch, whirl and quantize, and 'toolbox' functions such as removing isolated pixels, particularly useful for scanned images in which signal noise often appears, or pixel dispersal, which moves pixels around by a random amount to fuzz borders.

GFXLab24 doesn't have the power of image FX2.0, but it is a very good system, and is less system hungry than its commercial rival. Best of all, it is freeware.



A GFXLab24 sorts its stuff. I'd have more red please, Bob.

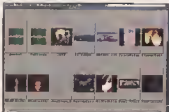
AMountains

Fractal landscape generator

Everyone should be familiar with the concept of fractal landscape generators by now after all we gave an excellent one away on the September issue cover disk last year. Vista is a dream to use, with dozens of user variables and a friendly GUI front-end.

AMountain takes a very different approach, offering raw power instead. It works in a fundamentally different way to Vista - while Vista treats the landscape as a 3D object, thus allowing you to generate flight-path animations and the like, AMountains takes the 3D appearance of the landscapes it generates. The downside is that you can't move the camera, the up side is that it is very fast. The image here was produced in about three minutes, where Vista would take much, much longer to produce an image of this resolution.

AMountains is a part of the Unix Xmountains, and as is usually the case with Unix ports has been written by people who think GUIs are for wimps. These





Amo Vision performing a real-time spinning wireframe. Show it!

There are a lot of options to play with, smoothing, contrast, vertical stretch, altitude, view level, slope, contours, colour-banding, light angles, etc., but they are all set via CLI parameters or by changing footprints on the Workbench icon. It will output to any screenmode you choose including CyberGraphics. There is no save, so output has to be taken with a screen grabber.

AMountain's algorithm generates the landscape in vertical lines, scrolling the screen to make room for more once it is full. By grabbing the screen regularly and carefully pasting the grabs together you could make hugely wide scrolling fractal backdrops. Imagine Defender looking like that.

NavWiperPro 3D Video wiper

NavWiper is an impressive utility from Amiga VR master Michael E. den Outer which performs three dimensional texture mapped screen wipes. Impressive video tiling can be an expensive thing to produce but a very reasonable £20 registration fee will buy you a keyfile to run this powerful utility.

The idea behind NavWiper Pro is that you define an animation length in seconds, position a wireframe shape in several keyframes, define a texture bitmap and hit go. The program calculates the position of the shape in all the in-between frames, allowing you to make the

wireframe flip, rotate and move. The final image is rendered in realtime (or close) to an ANIM5 file applying the texture you have defined (the image you want to wipe) to the wireframe shape using a chunky-to-planar routine not unlike the kind that can be found in games such as Globm and AB3D.

This is not an all-round tiling system, rather something with a very specific use, but one it performs very well. Sequences containing spinning and zooming screens can look impressive indeed - imagine instead of swapping images by sliding the first image from atop the second you could have the first image plunge away from the screen as if it was falling into the second, spinning and flipping as it goes. NWiper Pro will do this for you very quickly and very easily.

Xtrace

Bitmap to vector converter

One of the areas in which the Amiga has lagged behind other platforms is on vector graphics. Vector images are mathematically encoded rather than stored as a bitmaps, which means that they can be interpreted at any size without the pixels becoming embarrassingly large. Most users will have come across the difference between vectors and bitmaps in the use of fonts. When printing graphics, similar problems may occur due to the differences in screen resolution and bitmap resolution.

The idea is that you feed a standard bitmap image to Xtrace, and it breaks it down into a series of shapes made up of straight lines. Because these shapes are made of lines it is possible to rescale the image to any fraction by simply drawing the all the lines that go to make up the image that much longer or shorter.

Xtrace has numerous features to make the output as good as possible. You can perform operations on the original bitmap such as stripping out unused colours, or clearing up isolated pixels, which will make little or no difference to the image

but significantly reduce the complexity of the vector version. The final result can then be output as DR2D or EPS (Encapsulated PostScript). The software fee is 30DM.

AmiFig

Structured drawing package

Staying on the theme of vector graphics, AmiFig produces structured images.

Another piece of software based on an older Unix application, XFig, the workings of this program should be relatively familiar to regular readers, as a commercial structured drawing package, Design Works, was given away last month. AmiFig does not have the user-friendliness of DesignWorks, but has more power functions, a characteristic of Unix conversions. AmiFig has a 30DM registration fee but the unregistered version only limits the size of files you can save, so you can try before you buy.

Visual 1.13

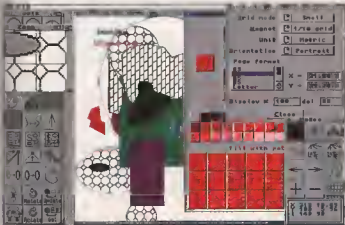
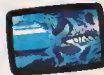
Image Cataloguer

Keeping track of large numbers of images can be a nightmare. The standard solution is a database with small 'thumbnail' copies of the images so they can be identified at a glance. Most software of this type will keep track of the file paths so that by clicking on one of the thumbnails, the full image can be viewed. The problem with this is that if you move a file, the program will lose track. Visual is a clever and original implementation to get around this problem.

Visual is in fact a visual directory browser. It represents the contents of each directory in icon format on the screen, which is either represented by a plain default icon or a small custom icon if one exists. These custom icons are thumbnails, generated by ImageFX or ADPro via Visual's ARexx port. The advantage of this is that all the icons can be moved with the original file and Visual will happily show the icon for the image in its new directory. The trade off is an extra set of icon files. ■

Andrew Korn

Readers with our CD issue will be glad to know that all this software is on the CD in the Magazine directory.



SMD-100

■ Price: £199 ■ Developer/Supplier: HiSoft ☎ 01525 718181 <http://www.hisoft.co.uk>

Your favourite films on CD with top quality sound and music can be a reality, but don't throw away your video of Trainspotting just yet.

When I was at University in a remote Australian town, video conferencing was seen as being a great money saver for local business. Thanks to video compression, some bad quality video and audio could be squeezed into a 2 megabits per second stream. At that rate a CD would only hold 40 minutes of the terrible quality video on offer. Just what does this have to do with HiSoft's SMD-100 AKA the Squirrel MPEG? Video compression is what it's about.

MPEG got better

However, things have improved since then and now a single chip can be used for playback at CD's standard single-speed rate of around 150K/s. Video quality also has the capability of being rather good depending on the quality of the encoding system in the first place. And MPEG (Motion Picture Experts Group)

compression also supplies near-CD quality audio as well.

Of course none of this is new. Commodore threatened to make MPEG big in the Western World with the MPEG cartridge for the one-time successful CD32. Unfortunately, they chose this time to go bankrupt so we'll never know how things could have been. This MPEG can allow the CD32 to play so-called Video CDs which are essentially MPEG on a CD-ROM so that you get 74 minutes of movie on a disk. Yes that means most Video CDs come on two CDs with a change being needed somewhere in the middle.

Stand alone

So what is HiSoft's SMD-100 then? It's your gone for the



▲ The artifacts generated as a side effect of the compression method are not too prominent.



▲ MPEG gets away with its heavy compression with the help of fast human eyes.

unique approach of creating a stand-alone MPEG decoder box. The SMD-100 is a SCSI device and in fact it's a SCSI controller of a kind which orders a connected SCSI CD-ROM to play and send the MPEG stream to the SMD 100 for decoding. For this purpose the black-box SMD-100 has two full sized Centronics style SCSI connectors on the rear so it may be placed inside a SCSI 'chain' i.e. between your computer and CD-ROM or even at the end if a terminator is attached to one of the connectors. There are

convenient dip-switches on the rear to configure the SCSI address and finally a 9-pin genlock connector and a SCART socket for video output.

So with an appropriate cable, the Amiga's RGB video can be passed through the SMD-100 and the monitor attached to the SCart socket. The video output will then appear in the colour-0 genlock space as with normal genlocks. You could have your Workbench on top of Four Weddings and a Funeral, for example, but more likely uses could be kiosk and video tiling presentations.

Most people will want the SMD-100 to play Video-CDs, a task which is done very well again depending on the encoding quality. I took the SMD-100 home with a hand full of movies and Menge video-CDs and jacked it into my 29" Sony TV. After connecting to a CD-ROM I found the SMD-100 hung once or twice and needed to be powered down by removing the power lead. This may have been a temporary SCSI 'hang' or the like. The SMD-100 comes with a remote control which directs it to tell the CD-ROM to play, stop or eject etc.

Nasty artifacts

Video output was superb on all titles though there were some nasty movement artifacts on a few badly encoded CDs. MPEG relies on predicting motion but it finds it particularly hard to reproduce with the resolution



Quickcam Interface

■ Price: £39.95 ■ Developer/Supplier: Eyetech ☎ 01642 713185

Roll up, roll up. They said it couldn't be done. The Mac has it, the PC has it, now the Amiga can have it too: video conferencing.

Thanks to Eyetech, the Quickcam revolution isn't going to pass the Amiga by. Mac and PC users have been able to enjoy the delights of video conferencing via cheap Quickcams for a while, and soon the Amiga will be in on the act. The problem has been one of ports, the Amiga's parallel port isn't up to the job, and to get around this Eyetech have developed a bizarre hydra-headed monstrosity of an interface which connects the Quickcam to your Amiga via the parallel and the disk drive port.

Not quite yet

Before everyone rushes out to buy one expecting to be able to video confer with their friend in Croydon or colleague in Tokyo, I ought to say that it isn't there yet.

For £40 you get a cable and some software. Eyetech do not supply the Quickcam itself. This is available from many PC dealers, such as DABS Direct (tel 0800 55 88 66) for £85. The

software is a useful but fairly basic image grabber. Setting up is a breeze, plug the camera in, switch on the computer, click on the Quickcam program icon and you're off. From the software you can alter the contrast, exposure, zoom and size, watching your alterations taking effect as you do them. The input resolution from the camera is 320 by 240 pixels, in 84 shades of grey but this can be scaled down to 80 by 60 pixels to get a greater update speed. How fast the screen updates is partly dependant on the speed of your system, on a 68030 based system I got screen updates at about 1 frame per second on the largest screen, and not far off real-time rates on the smallest. The software can freeze images and save them out as a grayscale TIFF or can spool frames to disk for you to make into an Anim yourself, Eyetech told us that they hope to build in Anim support but a CLI utility such as Bulldozer will turn the spooled frames into an Anim in no time.

CUseeme

Eyetech will sell you a video conferencing solution with colour and sound, but it costs £260 and only works as an Amiga to Amiga system. However, the imminent release of Hypercam from VMC, which Eyetech are distributing in this country as PortPlus should offer a solution. PortPlus is an A1200 plug-in board which adds fast serial and parallel ports - Eyetech believe this will allow

them to include an audio digitizer through the same Quickcam hardware and produce a full CU Seeme port. The PortPlus would also make the current elaborate connector unnecessary, offering an even cheaper Quickcam solution.

Contrasting appeal

In its present incarnation, it is only a tool for image making, but as a sometimes photographic, this appeals to me very much. The black and white limitation may concern those only interested in conferencing, but I've always preferred black and white images and was keen to find out what it could do. Lens quality on this sort of camera is low, although modern lens coatings allow even cheap lenses like this to produce sharp enough images at these low resolutions.

Beyond that, the major limiting factor in image quality is focus - the lens focus on video conferencing cameras is fixed at around half a metre, about the light distance for a camera mounted on top of your monitor and although the small aperture allows a reasonable depth of field, beyond 2m things go very soft.

The contrast and exposure range allowed imaging in a good range of conditions, although extreme brightness ranges, such as are encountered when people are backlit by sunlight through a window was beyond its capabilities. In more controlled conditions it was possible to produce quite acceptable images with it, and the combination of the on-air contrast and exposure controls alongside a post-production with a software such as PPaint, Art Effect or Photogenics opens up all sorts of creative possibilities. The high red-based colour balance emphasises skin blemishes delightfully, but that's all part of the adventure. ■

Andrew Korn

QUICKCAM INTERFACE

system requirements:

OS: 2.0+ , parallel and disk drive ports

ASB01

ASB02

BT000

BT001

BT002

BT003

BT004

BT005

BT006

OVERALL

Not as useful as it could be, but anonymous fun at the very least.

89



▲ Art & Alex games for the camera. Backcam produces four results - in good lighting conditions, (left): control program and gasp-processing allow more creative images



AMIGA A1200, OFFERS PLEASE CALL

GREY-TRONICS LTD

LOWEST PRICES

BEST SERVICE

RAPID DELIVERY

SALES FREE CALL 0500 737 800**OTHER ENQUIRIES 0181 686 9973 / 0181 781 1551****3.5" DISKS**

10.5" Disks	64.75	£5.99	+ 10 sec through box	Add £1.01
40 3.5" Disks	£17.99	£17.99	+ 100 cap lockable box	Add £4.01
50 3.5" Disks	£19.99	£19.99	+ 100 cap lockable box	Add £4.01
100 3.5" Disks	£39.99	£39.99	+ 2 x 100 lockable box	Add £8.01
150 3.5" Disks	£59.99	£59.99	+ 2 x 100 lockable box	Add £8.01
200 3.5" Disks	£79.99	£79.99	+ 2 x 100 lockable box	Add £8.01
500 3.5" Disks	£199.99	£199.99	+ 2 x 100 lockable box	Add £17.50
1000 3.5" Disks	£399.99	£399.99	+ 2 x 100 lockable box	Add £30.00

FREE LABELS + FREE DELIVERY BY PARCEL FORCE**CD ROM DRIVES**

COMPACT Discrom speed with Speedlink £129.99

ROM Double speed with Speedlink £147.99

GENLOCK

RUSON VIDEO GENLOCK

It's a high specification video product, that is ideal for both the live video for selling, live capture & effects in home cinema, and the most professional video shooting system. Generators generate HDL time & sync signals to all input devices and setting can be as low as £99

ACCESSORIES

Amiga to TV Link	£19.99
Amiga to Laser TV	£19.99
Amiga to Amiga (Parallel/Serial)	£19.99
Realtime expansion board 32K/327	£11.99
Joystick (parallel)	£3.99
Joystick Extension Lead 1m	£2.99
Printer Lead	£4.00
BOAT CABLES	
Amiga 1200/1500/286/386	£6.99
Microcable/Parallel/Serial	£6.00
Star/Chosen/Panasonic/Apple	£4.00
ACCESSORIES	
Amiga Disk Drives Real/Serial/Parallel	£1.99
Amiga Mouse (1500/286/386)	£11.00
External Hard Disk 320K/386/286/386	£24.00
TV Decoder (2 pin warranty)	£24.00
Amiga Mouse Mat	£1.00
15" LCD Monitor	£1.00
15" New Wave Card	£1.00
Printer 1500/286/386	£1.00
32K to Amiga 1200/1500/286/386	£1.00
Capacitors 1500/286/386	£1.00
Keyboard for C122 (requires 32K)	£17.00

Add £5.00 post delivery

INKJET CARTRIDGES AND REFILLS

HP Deskjet 500C/500/500C Black	£22.99
HP Deskjet 500C/500/500C Cyan	£22.99
HP Deskjet 500C/500/500C Magenta	£22.99
HP Deskjet 500C/500/500C Yellow	£22.99
Canon B710/280 Black Ink Refill	£7.99
Canon B710/280 Cyan Ink Refill	£7.99
Canon B710/280 Magenta Ink Refill	£7.99
Canon B710/280 Yellow Ink Refill	£7.99

Add £2 for delivery

TOP QUALITY RIBBONS

Assorted Canon 120/240 Black	£2.99
Assorted Canon 120/240 Cyan	£2.99
Assorted Canon 120/240 Magenta	£2.99
Assorted Canon 120/240 Yellow	£2.99
Assorted Canon 120/240 Black	£2.99
Assorted Canon 120/240 Cyan	£2.99
Assorted Canon 120/240 Magenta	£2.99
Assorted Canon 120/240 Yellow	£2.99
Assorted Canon 120/240 Black	£2.99
Assorted Canon 120/240 Cyan	£2.99
Assorted Canon 120/240 Magenta	£2.99
Assorted Canon 120/240 Yellow	£2.99
Assorted Canon 120/240 Black	£2.99
Assorted Canon 120/240 Cyan	£2.99
Assorted Canon 120/240 Magenta	£2.99
Assorted Canon 120/240 Yellow	£2.99

Add £2.00 post

MAGNUM RAM UPGRADES & ACCELERATORS

FREE QUOTE A12	8MB	4MB	8MB	16MB	32MB
RAM BOARD	69.99	89.99	109.99	N/A	N/A
RAM BOARD + 32MB	79.99	99.99	119.99	N/A	N/A
64032/32MB + CPU	99.99	139.99	179.99	199.99	269.99
64032/48MB	129.99	169.99	189.99	239.99	299.99
64032/32MB + CPU & FPU	129.99	169.99	209.99	264.99	324.99
64032/32MB	149.99	207.99			
64032/32MB	249.99	287.99	314.99	384.99	419.99
64032/48MB	329.99	367.99	394.99	434.99	469.99
64032/32MB	499.99	537.99	567.99	607.99	677.99

5000 IN INTERFACE

PCMCIA Compatible for use with wireless

Golden Image Trackball

■ Price: £19.95 ■ Supplier: Golden Image ☎ 0181 900 9291

G

mouse replacement trackball. On first impression, it feels rather shoddily made, its cheap plastic construction inspiring little confidence but a mouse I have from the same factory has lasted fairly well though, and the trackball does have a year's guarantee so I thought it worth a try out at least.

In use the trackball manages rather well, certainly in comparison to the Alfa Data trackball was reviewed a while back.

There is no way, however of removing the ball and cleaning it without taking the whole thing apart, which is not good for long life, but this is par for the course with trackballs.

The design is ergonomically excellent, the button arrangement well spaced and the ball easy to move. I found menu selection

surprisingly easy especially when replacing a single button Mac mouse in SheepsShifter.

Drawing with the trackball didn't quite give the precision of a mouse, although it produced better results than the older Alfa Data model. A sketch done with the trackball had rougher lines, whilst the mouse allows more confidence in exact positioning. There is a slightly greater sense of freedom with the trackball that encourages more lively sketching, but I preferred the feel of the mouse overall.

There is of course the ultimate test of all trackballs, Missile Command. Compared to a mouse, both trackballs won hands down. Comparing the two, I found the Alfa Data to be as good, the only time I didn't significantly prefer the Golden Image model.

Trackballs have never been hugely popular with most Amiga

owners, although I have met a few people who absolutely swear by them. If a trackball appeals to you, or if your desk is so small you keep running the mouse right off the edge then you could do a lot worse than this. ■

Andrew Korn

TRACKBALL

system requirements:
Any Amiga

Well designed case makes it easy to use
not as large as a mouse

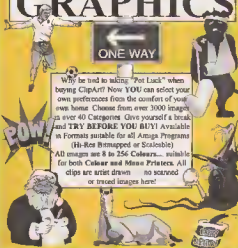
A little bit wobbly

Excellent price for a trackball

OVERALL
Top tracker but
I'll stick with
my mouse

82%

Pic'n'Mix GRAPHICS



Why be tied to taking "Pot Luck" when buying ClipArt? Now YOU can select your own preferences from the comfort of your own home. Choose from over 3000 images in over 40 Categories. Give yourself a break and TRY BEFORE YOU BUY! Available in Formats suitable for all Amiga Programs (Hi-Res Bitmapped or Scalable).

All images are in 256 Colours... suitable for both Colour and Mono Printers. All clips are artist drawn - no scanned or traced images here!

INK JET REFILLS

REFILLS (Microfired Non-Drop Formula) all Colours from £7p per refill COMPATIBLE CARTRIDGES. As good as original. But cheaper! from £4.99

We have been supplying our Customers with Refill Inks for many years, and most of our sales are re-orders. We demonstrate the quality of our Inks by providing a FULL COLOUR PRINTOUT with every Information Pack. Who else does that?

Pic'n'Mix FONTS



Unlike some of the cheap and cheerful Font CDs and Disks doing the rounds, our Fonts WORK! Select from over 4000 Fonts in both COMPUGRAPHIC and ADOBE formats and leave the rest up to us!

For Bulk Buyers we offer some very special deals with Fonts from 7p each.

We have been in business since 1991 and pioneered the Pic'n'Mix concept. Our service is unique with a TECHNICAL SUPPORT HELPLINE for all of our valued Customers.

ORIENTAL BRANCHES SHARPENED
Medusa STENCIL STRETCH
TOYBLOCK MAMMIE WASHBOOK!
POWERHIMM OCEANWORKS WHAT A RELIEF

For your FREE 46 Page Information Pack, either Write, Phone, or Fax us.

SELECTAFONT (Dept CU)

84 Thorpe Road, Hawkwell, Nr Hockley, Essex. SS5 4JT

FAX: 01702 200062

VISA



PHONE: 01702 202835

SELECTAFONT

PD Scene

public
domain

Commercial quality games and whatnots at silly prices. That's the beauty of public domain. Andrew Korn surveys the scene.

Parasite game

Parasite is a sort of a Doom type of game. It is a little bit like Corporation with just the smallest hint of

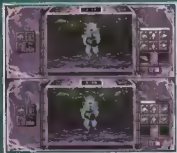


Dungeon Master thrown in for good measure. As is the usual way with Doom clones, you're in a big dungeon, or space station or something, armed only with a knife, a machine gun, a pistol and a med pack and you have to find your way out, blasting a few monsters on the way and collecting way nice loot that happens to be lying around. There's an assortment of weapons knocking about for you to pick up and there are locked doors you will need to find keys to open.

This is an true 3D game, just the lower budget sort common to most first person RPGs. Despite this, the game comes across much more as a Doom type, with lots of walls to shoot for secret rooms full of goodies and the option to play multiplayer with a split screen and blast waves holes out of your mates.

Presentation is of a fairly high standard, full of stuff everywhere, but the graphics miss a commercial sheen, backgrounds are confusingly indifferently and monotonous and lacking animation.

The puzzles are not of the highest order either - it took me ages to get out of the first room, not because of some brain teasing conundrum, but because it didn't occur to me to try opening a door with a knife where a machine gun had failed.



Available from:
F1 Livenessware,
31 Wellington
Rd., Exeter,
Devon EX2
9DU.
Tel: 01392
483800.
Price: £3.95
plus 75p P+R.

83

1497

Multiplayer strategy

I have often thought how much better Sid Meier's

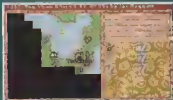
Colonization or Civilization would be with a multi-player option. Dutch Colonization fan Jim Hagqvist agrees and has done

something about it. 1497 is his version of Colonization for up to four players and it is in many ways a better game than the original.

In case you missed Colonization when it came out, it is a game of discovery, colonization and conquest. 1497 differs from Colonization in several significant ways. There is no charge to go back to with your goods, and money is made by selling to local traders. There is also a much smaller range of colonist's occupations, because 1497 has dispensed of the secondary economy - in 1497 you sell all of your raw materials rather than more profitably converting them into trade goods as in Colonization. This takes the depth out, but as there are up to four persons playing in this game, this is a very sensible omission; a single move would otherwise take most of an evening.

1497 has a more varied range of terrain, including Volcanoes, which look great and can be mined for gems, but have the disadvantage of occasionally erupting and bearing your settlement to the ground. Graphically 1497 comes out rather well; there isn't the polish of its commercial inspiration, but there are some nice animated touches and it seems highly over Colonization in the speed stakes, scrolling far faster.

Sadly, there isn't the same of progress that the 'founding fathers' feature goes to Colonization, but maybe with encouragement Jim will put some thing like that in as updates. Overall however, 1497 plays quickly enough for a four player game to be completed before sanity sets in. Not quite a masterpiece but it's a fine outstanding shareware package.



Amulet path:
Games2play
1497.lha (112k)
or call your local
PD library.

93

Aminet Gems Voxel engines



With so many of our readers online these days, an increasing number of people use these pages to decide what files to FTP rather

than what disks to buy. So I will be going on the occasional trawl of the Aminet to look for smaller gems for some of you. This month, I went hunting Voxel engines. Voxel em, roughly speaking, 3D pixel and voxel engines are a technique used for generating relatively fast 3D scenes, notably in the PC helicopter blaster Comanche.

Schwarz and Schneider's VoxeIAGA, written in AmigaE, is the fastest of the lot, managing around 40fps on a fast '030, but it is also the least graphically impressive, the landscape looking like rolling hills of mud. V EngineZ from Jorg Gonske is visually much more impressive, resembling a medium resolution Vista mader, and managed an acceptable 10fps or so. VoxeIEngine is Jorg's latest update, a total rewrite with even better graphics, a lovely cloud-filled sky, fine button controlled height, and as fps counter which informed me that it managed 11.47fps on the same machine, 3.87 fps on an unexpanded A1200 and 16fps on the office '660.

AmigaNet Path: VoxeIAGA: GFX/AGA/VoxeIEngine_fix.lha
V EngineZ: GFX/AGA/V EngineZ.lha
VoxeIEngine: GFX/AGA/VoxeIEngine2b.lha

Premier Sixes Footy manager game

There is a lot that is impressive about this title when the aim is to manage a premier league team in a six-a-side competition. It looks very good, with a front end which is a little bit Champ Manager, and plays well, with a text commentary which again follows the Champ Manager lead of what is taking place. There is a wealth of player stats to give you a sense of your players, and the tactics section has enough depth to allow a lot of twoeching of your style to counteract opposition tactics. After each game, each player is rated for their performance out of 19, shots on target and assists on totalled and the computer chooses a side of the match.

Sounds good? But all isn't rosy. You can't look at the stats of other players, the highest scorer table only covers your own team and so on. Not that such information is all that important as you can't buy and sell players anyway. There is a lot going for this game but to rate higher it needs a transfer market for a sense of involvement.

Available from: Mr. Robbie Mapping, 1 Hewler Cottage, Winterweight Road, Swindon, S.Yorks
SG4 8LA
Price: £2.50 including P+P elsewhere £1.

Player	Pos	Age	Height	Weight	Goals	Assists	Shots	Passes	Interceptions	Tackles	Fouls	Yellow Cards	Red Cards
Goalkeeper	1	25	180	75	0	0	0	0	0	0	0	0	0
Defender	2	25	180	75	0	0	0	0	0	0	0	0	0
Defender	3	25	180	75	0	0	0	0	0	0	0	0	0
Defender	4	25	180	75	0	0	0	0	0	0	0	0	0
Defender	5	25	180	75	0	0	0	0	0	0	0	0	0
Defender	6	25	180	75	0	0	0	0	0	0	0	0	0
Defender	7	25	180	75	0	0	0	0	0	0	0	0	0
Defender	8	25	180	75	0	0	0	0	0	0	0	0	0
Defender	9	25	180	75	0	0	0	0	0	0	0	0	0
Defender	10	25	180	75	0	0	0	0	0	0	0	0	0
Defender	11	25	180	75	0	0	0	0	0	0	0	0	0
Defender	12	25	180	75	0	0	0	0	0	0	0	0	0
Defender	13	25	180	75	0	0	0	0	0	0	0	0	0
Defender	14	25	180	75	0	0	0	0	0	0	0	0	0
Defender	15	25	180	75	0	0	0	0	0	0	0	0	0
Defender	16	25	180	75	0	0	0	0	0	0	0	0	0
Defender	17	25	180	75	0	0	0	0	0	0	0	0	0
Defender	18	25	180	75	0	0	0	0	0	0	0	0	0
Defender	19	25	180	75	0	0	0	0	0	0	0	0	0
Defender	20	25	180	75	0	0	0	0	0	0	0	0	0
Defender	21	25	180	75	0	0	0	0	0	0	0	0	0
Defender	22	25	180	75	0	0	0	0	0	0	0	0	0
Defender	23	25	180	75	0	0	0	0	0	0	0	0	0
Defender	24	25	180	75	0	0	0	0	0	0	0	0	0
Defender	25	25	180	75	0	0	0	0	0	0	0	0	0
Defender	26	25	180	75	0	0	0	0	0	0	0	0	0
Defender	27	25	180	75	0	0	0	0	0	0	0	0	0
Defender	28	25	180	75	0	0	0	0	0	0	0	0	0
Defender	29	25	180	75	0	0	0	0	0	0	0	0	0
Defender	30	25	180	75	0	0	0	0	0	0	0	0	0
Defender	31	25	180	75	0	0	0	0	0	0	0	0	0
Defender	32	25	180	75	0	0	0	0	0	0	0	0	0
Defender	33	25	180	75	0	0	0	0	0	0	0	0	0
Defender	34	25	180	75	0	0	0	0	0	0	0	0	0
Defender	35	25	180	75	0	0	0	0	0	0	0	0	0
Defender	36	25	180	75	0	0	0	0	0	0	0	0	0
Defender	37	25	180	75	0	0	0	0	0	0	0	0	0
Defender	38	25	180	75	0	0	0	0	0	0	0	0	0
Defender	39	25	180	75	0	0	0	0	0	0	0	0	0
Defender	40	25	180	75	0	0	0	0	0	0	0	0	0
Defender	41	25	180	75	0	0	0	0	0	0	0	0	0
Defender	42	25	180	75	0	0	0	0	0	0	0	0	0
Defender	43	25	180	75	0	0	0	0	0	0	0	0	0
Defender	44	25	180	75	0	0	0	0	0	0	0	0	0
Defender	45	25	180	75	0	0	0	0	0	0	0	0	0
Defender	46	25	180	75	0	0	0	0	0	0	0	0	0
Defender	47	25	180	75	0	0	0	0	0	0	0	0	0
Defender	48	25	180	75	0	0	0	0	0	0	0	0	0
Defender	49	25	180	75	0	0	0	0	0	0	0	0	0
Defender	50	25	180	75	0	0	0	0	0	0	0	0	0
Defender	51	25	180	75	0	0	0	0	0	0	0	0	0
Defender	52	25	180	75	0	0	0	0	0	0	0	0	0
Defender	53	25	180	75	0	0	0	0	0	0	0	0	0
Defender	54	25	180	75	0	0	0	0	0	0	0	0	0
Defender	55	25	180	75	0	0	0	0	0	0	0	0	0
Defender	56	25	180	75	0	0	0	0	0	0	0	0	0
Defender	57	25	180	75	0	0	0	0	0	0	0	0	0
Defender	58	25	180	75	0	0	0	0	0	0	0	0	0
Defender	59	25	180	75	0	0	0	0	0	0	0	0	0
Defender	60	25	180	75	0	0	0	0	0	0	0	0	0
Defender	61	25	180	75	0	0	0	0	0	0	0	0	0
Defender	62	25	180	75	0	0	0	0	0	0	0	0	0
Defender	63	25	180	75	0	0	0	0	0	0	0	0	0
Defender	64	25	180	75	0	0	0	0	0	0	0	0	0
Defender	65	25	180	75	0	0	0	0	0	0	0	0	0
Defender	66	25	180	75	0	0	0	0	0	0	0	0	0
Defender	67	25	180	75	0	0	0	0	0	0	0	0	0
Defender	68	25	180	75	0	0	0	0	0	0	0	0	0
Defender	69	25	180	75	0	0	0	0	0	0	0	0	0
Defender	70	25	180	75	0	0	0	0	0	0	0	0	0
Defender	71	25	180	75	0	0	0	0	0	0	0	0	0
Defender	72	25	180	75	0	0	0	0	0	0	0	0	0
Defender	73	25	180	75	0	0	0	0	0	0	0	0	0
Defender	74	25	180	75	0	0	0	0	0	0	0	0	0
Defender	75	25	180	75	0	0	0	0	0	0	0	0	0
Defender	76	25	180	75	0	0	0	0	0	0	0	0	0
Defender	77	25	180	75	0	0	0	0	0	0	0	0	0
Defender	78	25	180	75	0	0	0	0	0	0	0	0	0
Defender	79	25	180	75	0	0	0	0	0	0	0	0	0
Defender	80	25	180	75	0	0	0	0	0	0	0	0	0
Defender	81	25	180	75	0	0	0	0	0	0	0	0	0
Defender	82	25	180	75	0	0	0	0	0	0	0	0	0
Defender	83	25	180	75	0	0	0	0	0	0	0	0	0
Defender	84	25	180	75	0	0	0	0	0	0	0	0	0
Defender	85	25	180	75	0	0	0	0	0	0	0	0	0
Defender	86	25	180	75	0	0	0	0	0	0	0	0	0
Defender	87	25	180	75	0	0	0	0	0	0	0	0	0
Defender	88	25	180	75	0	0	0	0	0	0	0	0	0
Defender	89	25	180	75	0	0	0	0	0	0	0	0	0
Defender	90	25	180	75	0	0	0	0	0	0	0	0	0
Defender	91	25	180	75	0	0	0	0	0	0	0	0	0
Defender	92	25	180	75	0	0	0	0	0	0	0	0	0
Defender	93	25	180	75	0	0	0	0	0	0	0	0	0
Defender	94	25	180	75	0	0	0	0	0	0	0	0	0
Defender	95	25	180	75	0	0	0	0	0	0	0	0	0
Defender	96	25	180	75	0	0	0	0	0	0	0	0	0
Defender	97	25	180	75	0	0	0	0	0	0	0	0	0
Defender	98	25	180	75	0	0	0	0	0	0	0	0	0
Defender	99	25	180	75	0	0	0	0	0	0	0	0	0
Defender	100	25	180	75	0	0	0	0	0	0	0	0	0

83 %

Mon-Fri 9am-7pm Sat 10am-4pm. Please note: Some titles may not be released at the time of going to press. Most titles are despatched same day, but can take up to 28 days. VAT is included on all titles.

[illegible]

PD Utilities



Utilities are those essential little gadgets that make life much easier. Some goes for public domain. Here is a selection of some darned useful little items that once you try out you wonder how you ever got by without them. Well Andrew Korn thinks so anyway.

Onform2.0

Business forms utility

Whilst order forms and invoicing can be easily produced with more general purpose software such as spreadsheets or word processors, there's no doubt that a dedicated utility can be a real boon to a small business. Onform is a convenient utility - it produces a well laid out order form or invoice, handling financial calculations automatically with more ease and simplicity than using a less specialised utility. Simple database features come in handy especially for a company which uses a range of suppliers or has account customers.

The program is easy to use once you have it set up, but on initial usage, user preferences must be defined, which can be a bit of a pain. There is ample documentation which can be read offline or used as an on-line help feature, but for some bizarre reason the help screen can only be scrolled (at a snail's pace) with the cursor keys, which makes it next to useless if you want to read something near the end of the text document. It is far faster to ask the program and read the document through Workbench.

The printout was clear and well designed, but a fault is the page formatting left the thousands digit off unit prices, which effectively limits you to products at £999.99 or less each, although the totals column did show the correct value. If you can live with this, and invoicing/ordering takes up a lot of your time, this could be a real time-saver.



Available from:
Paul Lathwell PO,
3 Sweetbriar
Close, Gade-
bridge, Hemel
Hempstead, Herts
HP1 3PA.
Or contact your
local PD library.



83 %

Art Effex

Kid's paint package



Graphics packages on the Amiga get better and better all the time, but not easier to use.

Photogenic and Art Effex may be able to

handle all sorts of powerful image processing functions but they aren't the best thing for your kids to learn on. Which is where Art Effex comes in. There is an absolute bare minimum of control features - no screenmode selection, even the palette is uneditable and don't expect watercolour draw modes. On the other hand, if you're a six year old the facility to stamp down images of smiling suns and clouds is far more important.

There are actually many things wrong with this package - the airbrush effort was so fast it quickly filled its boundaries and produced patchy squares, the zoom function is rather badly implemented and so on, but there are also many things right. The toolbar is simple, intuitive and brightly coloured, amusing samples play when you draw (yes, you see switch them off!) and the whole thing is designed to allow simple, colourful images to be produced quickly and without difficulty.

There is a bit too much falling between two stools here - I can't help thinking that some features are in for the sake of looking like a paint package, such as the image processing options which just draw a few lines over your picture, and add very little to the program, but overall this is the kind of fun, trouble-free package you should be looking at if you have kids whose artistic tendencies need encouragement.

The demo version is slightly cut down, the full version has a much larger range of stamps (built in brush images) and one or two minor extras such as not being save disabled.

Available from Arrow PD, PO Box 7,
Oxey, Kent CT1 4AP, Tel: 01304
032344. Price: 75p plus 75p P+P.
Full Version: £3.99.

85 %

AmigaDOS Guide v2

Multimedia guide

During the long and noble history of the Amiga it has been sold with any number of manuals and packages, and almost all of them have lacked anything approaching decent AmigaDOS documentation, which is a pity because AmigaDOS is actually really quite easy to use and extremely powerful.

The AmigaDOS Guide is a multimedia presentation of a broad reaching, if not extremely detailed guide to AmigaDOS, its commands, error messages, and applications. There is also coverage of some of the Workbench applications such as the preference utilities and multiview. It won't make you a world authority on AmigaDOS, but it will cover the basic usages of the AmigaDOS commands.

The people who would get most out of this package are not absolute beginners. It expects a reasonable familiarity with the concepts of AmigaDOS, although if you are happy doing the odd Dir, Copy and Delete, you know enough to start benefitting. The entries on each command tell what it is for, but miss out a little on the details on usage. For instance the coverage of DiskDirector advises against using it on FFS disks, which is the standard line. Advising against teaching it with a monkey on a ten foot pole would have been more useful advice.

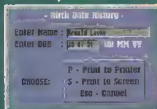
Available from: Online PD, The Clusters, Halsall Lane, Farnley, Liverpool L17 3PX. Tel: 01704 834336. Price: 75p plus 75p P+P.



83 9/96

Birthday History v2.24

Birthday database



This is one of those utilities that have absolutely no practical value but can be of enormous use when your sloppy halfwit cousin comes to visit and demands to have a demonstration of your computer. You know that trying to explain OsteMed would be a nightmare and

cousin halfwit would find Worms offensive, so you load this up and it will keep them amused for ages.

Birthday History is written in Blitz basic. It has a simple but effective interface, and looks good. Operation is ultra simple - you type in your name and date of birth, and off it goes, producing an output to printer or screen which tells you all sorts of useless but interesting information about when you were born, such as the news stories of the period, the hit films and music of the time, the sports results, famous people who share your birthday and so on.

The disk comes with a configuration file which allows you to edit the data and add more records for the last few years of the century which is a breeze to use and demonstrates how much better blitz is at GUIs than Amos.

There is a shrewd fee of £5 the author asks you send if you find yourself still using the software after 30 days, which is fair enough. After all, that's about how much you'd expect to pay for a printout from something like this from your local tourist trap.

Available from: Online PD, The Clusters, Halsall Lane, Farnley, Liverpool L17 3PX. Tel: 01704 834336. Price: 75p plus 75p P+P.

86 9/96

UFA

Multimedia guide

UFA, not pronounced 'You Eff Eh' as you might expect but rather 'Goo-fah' as is 'Goo-fah cryin' out loud, I cut myself!' is a two disk multimedia first aid guide from the slightly weird mind of Mark Swesey and it might just save your life. It is a well laid out hyperbook presentation demonstrating what to do in cases of epilepsy, sudden childbirth, drug overdoses, lacerations, even bullet wounds and all complete with true to form first aid book style cheesy illustrations. I can't honestly imagine that anyone with a compound fracture is going to limp over to their Amiga to find out what to do as it is an educational tool, it's a good good.

There is even a bonus disk with a nice print and click hyperbook presentation of one of those 'Choose Your Own Path' books that were so popular before the Japanese invented Sega and Nintendo, Wacky, and informative too.



Available from: Strangle Software, 18 Birchfield Road, Longsight, Manchester, England M15 6XP. Price: £3 plus 75p P+P.

85 9/96

LPDSET-1

Utils anthology

Liesk PD have come up with an ingenious way of getting you to pay for their catalogue disks - they have shovelled it full of great Amint downloads. 450k of archives are stored on the disk alongside GuiArc and a simple PPGuida de-archiving from and to access them as well as a PPGuida catalogue of all the disks they will sell you.

There are no docs directly accessible from the PPGuida front end, so you have to guess from the titles what software you are interested in. It would have been very little work for the disk compilers to write a file or two about what each archive contained, which would, for instance, save non-Germes readers from bothering de-archiving the tantalising sounding A1200TowerFAQ. There is an emphasis on technical documents, with a couple of patches to get hardware running properly when the Amiga doesn't quite agree with it, a monitor driver which claims to allow flicker free hires on 1064 monitors and a variety of files for the DIY'er such as an A1200 Hardware FAQ, a fix for the screen flicker on early A1200, using a PC power supply etc.

On the software front, there are a few small but rather good utility programmes too. DARC is a rather good file finder with built in de-archiving, very useful if you always forget where you put yesterday's downloads. Diary PD is a plain but powerful diary program, and Win95 is yet another taskbar utility, which is both the least interesting and most useful I've come across.

I can see the compilers of LPDSET-1 in my mind's eye, deciding to make their catalogue disk more interesting by shovelling stuff from Amint onto it. Not that this matters too much when the shovelfare is all pretty good.

Available from: Liesk PD, 28 Stirling Court, Grantham, Leics. Tel: 01476 401451. Price: 75p plus 75p P+P.

81 9/96



CD-ROM Scene



Andrew Korn has all the latest CDs. Nobody but nobody gets to see them before him.

Aminet 15 and 16



Typical isn't it. Nothing for a month, then two come at once. In true Aminet tradition, Aminet 15 presents 500Mb or so of data that has arrived since Aminet 14, reviewed in our January issue. Aminet 16 has about another 600Mb of new material since then. In case you are new to the Aminet, it is grouped by subject for easy access, the subjects covering things like biz/patch which is filled with upgrade patches for commercial and shareware software, or GFX9Dobj, where objects for Imagines, and LightWave can be found.

The bonus on Aminet15 is a collection of MPeg files. MPeg compression is a video compression system used on video CDs, a hard process to make look good, requiring continual adjustment to get decent results. The unfortunate consequence is that the image quality in these MPegs is very low, and what with Amiga MPeg players all working through software, you'd be lucky to get anything close to smooth playback on an '060. On my '030 50MHz they run at about four frames per second. On the plus

front Aminet 15 has a good games section, with two notable being Wheels, a very fast 3D Voxelspace racing game, and Genetic Species, a brilliant Doom clone which runs on that '030/50 at about as well as Doom on a 486. There is also Nenodum, a 256 colour fast Doom engine (no game) which takes up only 4k - totally useless, but fairly amusing.

On the utilities front, Aminet 15 is well served, notable inclusions being WhirlGif 2.0, the GIF animation maker, MUI 3.6, and the excellent XTRACE which converts bitmaps to vectors. Less obviously useful entries include the Orc Atmos emulator and the Water cooled Amiga DIY project. HighGFX is a new monitor driver, which unlike the standard MonEd hacks is a new screenmode claiming SVGA like resolutions of 1024 by 768, but it didn't work on a 1438 monitor.

Aminet 16 seems to have done well in the graphics department, with a collection of Escheresque drawings from Unreal, a Creation computer surrealist, and some very strange animations from Pole Miecz Wojciechowski and



friends. There is also a pix/eric directory containing a couple of comic strips and a colourful Halloween pic of his latest furry female creation, a skunk called Sabrina and directory of (vile) tileable textures.

The utilities directory contains a collection of tools and utilities for the Zip drive. Although Zip drives will 'plug and play' on an Amiga, Image haven't bothered producing Amiga versions of the various utilities they supply with the drives. This small collection gives you write protection, low level formatting, Appleton disk ejection, etc. There are also Mac and PC format mountaints to allow cross platform reading of Zips via CrossMac and CrossDos. Inclusion of the month award goes to Amigolock, a superb hardware/software hack which displays your computer's CPU load on a moving coil (needle) meter plugged into your joystick port.

On the Games front, Aminet 16 has some interesting demos

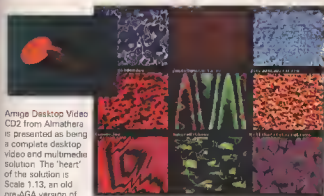
Slipstream is a Wipeout type game, Gravity Fight is one of the best gravity wars games going and Wendetta is a shoot 'em up with glorious graphics. Particular note has to go to Evil's Doom, not yet another Doom clone, but an AGA-only RPG which looks stunning, and has some great cheesy fantasy gibberish such as "where seas were of blood and books were made with human skin."

X-Philes will be kept occupied by two issues of Dreamland, a disk mezzine - the truth is in there somewhere.

Available from: Weird Science, 1 Rowlandson Close, Leicester, Leicestershire LE4 2SE. Tel: 0116 234 0682 Price: £14.99 each plus £1 P+P for 1, £1.50 for two.

90

Amiga Desktop Video CD2



Amiga Desktop Video CD2 from Almathere is presented as being a complete desktop video and multimedia solution. The 'heart' of the solution is Scale 1.13, an old pre-AGA version of the package,

although it is still a perfectly useable title, most users will want to use the resources supplied on this disc with their own more up-to-date authoring packages.

What really makes up the meat of the disc is the fonts, graphics and backdrops. Discs full of these things are ten a penny, and to stand out in the marketplace, any new disc really has to have an edge, something its rivals don't have. In the case

of Amiga DTV CD2, this edge is appropriateness. Scanning through the 200 colourfonts, 150+ adobe type 1 fonts and 200 odd backdrops, I got a real sense that they had been selected, where so often things are just shoved. The fonts all look like they might be of use, and specifically of use in a DTV context. The textures are all similarly useful looking, some simple and effective, some over the top and

insane, but no random you'll-be-lucky-if-you-ever-find-a-use-for-them memes of the sort that are so common in this sort of disc. What's more, an increasing rarity, you'll find a lot of textures here that aren't on every other CD-ROM in your collection. There is a small selection of short animations, mostly things like rotating pens and coins which again seem appropriate to the purpose.

Several of these animations are also supplied in IFF frames, which make them far more useable for purpose they are intended, especially in their instance of the VTR clock.

The presentation of the disc is very straightforward. There are no fleshy front ends or elaborate search routines. Instead the compilers rely on that old faithful, Workbench, with a few little utilities scattered around to make life easier. If, for instance, the

default textfile reader doesn't suit you, no problem, Tootles is there, a commodity which intercepts default tool calls to tools you don't like and translates them into tools you do. The textures are all indexed, and can be viewed from Workbench with either of the two viewers supplied, as can the sample memes equipped with each colourfont.

You get the feeling that the compilers of this CD cared about what they were doing and really put some thought into what people would find useful. It shows in the way they have named the textures, people just don't invest that much time coming up with comedy titles in showware.

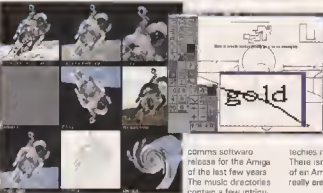
Available from: Almathere, Southerton House, Boundary Business Court, 92-94 Church Road, Mitchem, Surrey CR4 3TD. Tel: 0181 667 0040. Price £14.95 plus £2.25 P+P

90%

Meeting Pearls 4

The Meeting Pearls collections are kind of like an Amnet geek special. Thousands of software titles, sorted into Amnet-like directories of subject matter, with an Amnet-like front end. This CD is aimed at the more technical user though, and this is reflected in the wider range of options presented to you when you click on a file from the front end, allowing you to view docs, run software, copy the drawers, open a file handler utility or add to a hostlist. Alternatively there is a MUI-based search engine and directory tree utility. If the Meeting Pearls front end scores highly over Amnet's in the power and usefulness stakes, the CD compilers seem to have got far less to start up from the front end than is typical for an Amnet collection.

The tech nature of the disc is apparent in the software selection too, with a large selection of programme utilities, including the Amiga E programming language, a version of Lisp and a collection of source code for chunky to planar routines.



A strong selection of utilities includes some interesting and obscure pieces of software, such as a spectrogram analyser which takes sample data and converts it into a 'voiceprint' which is, at least in theory, as foolproof an identification system as a fingerprint. Comms users are well catered for, with a version of pretty much every significant

comms software release for the Amiga of the last few years. The music directories contain a few intriguing items such as an editor for Yamaha DX7 voices, and the disk utilities directory contains a bunch of AFS tools, including an AFS volume defragmentation utility. For the REAL techies, there is some HAM radio software - ever wanted to send you E-mail at really slow speeds via the airwaves?

Getting a little less techy, the graphics directories are a real

bonus. GFXLib24 is a very powerful image converter/processor, and AmFig is a part of the powerful Unix structured drawing package XFig. The games directory contains all the usual suspects, nothing much new, but some old favourites such as Shophard, Space Taxi and Zerberk. After all,

techies need to have fun too. There isn't the breadth and depth of an Amnet collection, but there really are some pearls.

Available from: Weird Science, 1 Rowleedon Close, Leicester, Leicestershire LE4 2SE. Tel: 0116 234 0852. Price: £8.95 each plus £1 P+P

88%

Art Gallery

Fevered twists of the imagination are translated into art on millions of Amigas out there and sent in for the world to see. Here's the pick of the bunch.



Artist: Patrice Mills, Belgium
Amiga: A1200 SW: Imagine, Photogenics



Artist: Jaff McDermot, Stockton on Tass
Amiga: A1200
Software: Imagine 3



Artist: The mysterious IJL from Chester sent in this picture. That's all we know about it but it looks good.



Artist: Jonathan Scott, Norwich
Software: Cinema 4D, DPaint IV
Amiga: A1200

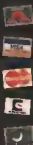


Artist: David Jorge, Portugal
Software: LightWave
Amige: A1200



(Above and top left) Artist: Angus Lee, Inverness
Software: Imagine 3, DPaint IV, ImageFX 1.5

Amige: A1299, 1260 Blizzard



tel: (01263) 722169

SADENESS Software, 13 Russell Terrace, Muesley, Norfolk, NR11 8LJ

Tel/Fax: (01263) 722169 or Mobile Number 0370 766679

Email: rich@sadeness.demon.co.uk <http://www.sadeness.demon.co.uk/>

Opening times: 9.30am - 6.00pm (Mon-Fri), 9.30am - 1.00pm Sat)

NEW STOCK

Adult Session 1, 2 or 3D.....	£17.99	Insight Technology.....	£17.99
Adult Session 4 (Adult Animations).....	£27.99	Into The Net (2CD).....	£17.99
AGA Experience Vol 2.....	£27.99	Geek Gadgets (NEW).....	£17.99
Amiga Desktop Video 2 (New).....	£13.99	Learning Curve.....	£17.99
Amiga Developer v1.1.....	£13.99	LightRom Gold.....	£17.99
Amiga 12, 13, 14, 15, 16 or 17.....	£11.49	LightRom 4.....	£27.99
Amiga Subscriptions Available.....	£18.99	Magic Publisher.....	£44.99
Amiga Box Set 1.....	£19.99	Meeting Pearls 4.....	£9.99
Amiga Box Set 2.....	£27.99	Mega Anthology.....	£17.99
Amiga Box Set 3.....	£32.99	Multimedia Backdrops.....	£17.99
Card Games.....	£13.99	Multimedia Experience.....	£17.99
Card Rom.....	£14.99	Official Octamedia CD.....	£19.99
Draw Studio (Poppy).....	£39.95	Oh Yes More Worms.....	£4.99
Draw Studio (CO).....	£74.95	Self-X Sensation.....	£17.99
Encyclopedia.....	£22.99	Sound FX Sensation.....	£13.99
Euro CD Vol 1 (NEW).....	£11.99	Sounds Terrific 2.....	£17.99
Horror Sensation.....	£17.99	Specy 9.....	£15.99
Imagine PD3D.....	£17.99	Special Effects Vol 1.....	£17.99
Insight Dinosaurs.....	£17.99	System Booster.....	£17.99
		Utilities Experience Vol 1.....	£8.99

Please add £1 p&p to all orders

Make cheques/postal orders payable to SADENESS Software



CD-X (Working Title Only), is an all new interactive Multimedia Encyclopedia of the Paranormal. Displayed in superb HTML documents which covers many topics, including: Aliens and UFOs - This CD will be one of the best resources for anybody even remotely interested in Alien life forms, Unidentified Flying Objects, Alien abduction cases and Close Encounters etc. With hundreds of informative and interesting case files, a comprehensive UFO image gallery some of the very best Web Sites, masses of quality animations and sound samples and more, this is a real multimedia experience.

Government Coverups and Conspiracies - Did you ever think that there were things that your government weren't telling you? Well, there is! Some of the most top-secret documents, pictures and files are here for you to see. Magic 12 UFO group documents, 'authentic' military UFO photos, and much more - like some of the most interesting theories on the JFK assassination.

Murders and Serial Killers - We have collected information about some of history's most evil people - from Adolf Hitler to Jack the Ripper. Read all about their most unbelievable and gruesome crimes...

The LATEST EBE report including detailed SETI information. Also, the very latest updates on the amazing news of fossilised life signs found on a meteorite from Mars by NASA! **Science-Fiction Art** - On this CD, there are details about the World's greatest Science-Fiction artists! For example, we have created a special exclusive H.R. Giger (well known for his work on Alien) gallery!

... And loads more such as: dinosaurs, witchcraft, voodoo, cat, crop circles, assassinations, space, time travel, bigfoot, worm holes etc.

SYSTEM REQUIREMENTS: Any AGA Amiga, 1meg (GFX Card recommended but not needed), Apple Mac or PC. Web browsers included for all formats.

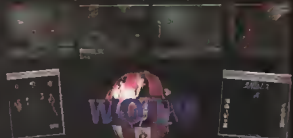
We have an On-Line Usable Preview on our Web Site at:
<http://www.sadeness.demon.co.uk/cd-x.html>

CD-X is retail at £29.95 but we are offering a Pre-Order price of £24.95



OUT NOW £29.95

SYSTEM REQUIREMENTS: Any AGA Amiga, 2meg, Hardrive only



Women of the Web is an all new CDROM which is compatible with any AGA Amiga, PC or Apple Mac. It's an Interactive Multimedia Encyclopedia of over 450 meg of images, text related info, MPEGs, WAV and MIDI files for over 250 female celebrities.

Women of the WEB is displayed in superb HTML documents which can be viewed using any WEB browser, ie AWEB, Ibbrowse, Navigator, Netscape etc. Web browsers are included for all formats. Ready to run (Amiga Users will see an all new Exclusive demo of AWEB version 2.1)

Here are just a few celebrities featured on WOTW: Cindy Crawford, Gena Lee Nolin, Pamela Anderson, Teri Hatcher, Jennifer Aniston, Sandra Bullock, Courtney Cox, Helena Christensen, Yasmine Bleeth and many many more!

We have an On-Line Usable Previews on our Web Site at:

<http://www.sadeness.demon.co.uk/wotw.html>

OUT NOW £24.95





Those of you on a quest for knowledge should go no further. Welcome to the section of the magazine that does its best to verse you in all things Amiga.

76 Imagine 4.0

It's the Forms editor under the spotlight this month, a valuable tool for modellers. Plus on page 79 there's a chance to get the manual.

82 OctaMED Soundstudio

More musical musings and tricks of the trade are at your disposal with our guide to this wonderful music package.

84 Wired World

Ssssh, you never know who may be listening or reading your Emails for that matter. You want privacy? Here's how to get it.

86 Net God

Never one to sit on the fence, NetGod shares his views and lets us know what's going on in the Internet.

88 Surf of the Month

Once again, we send someone off on a surfing holiday around the net and then wait to see what they come back with.

94 Masterclass

Yes it's time to break into the Amiga's shell and find out what inside. Is it a softy centre or hard boiled?

97 FAQ

What's the point of it all? Should I throw my Amiga onto the scrapheap with the rest? These questions and others answered.

98 Q&A

Our resident Amiga experts are here to help you with any Amiga-related problem that you may have.



Extras

102 Backchat

Our guide to where you can get Amiga products is really taking off. Turn to page 103 for the new revamped list. If you don't see your local shop there send its details in to us.

104 Points of View

The team huddle together for some warmth and then go off into their separate corners of the office to come up with their latest point of view.

Amiga Workshop

Imagine 4.0



We're staying on form with a little help from Imagine 4.

Some objects are easier to make in the Forms Editor as it is designed to create objects from cross-sections. There is total control over symmetry, so objects as diverse as wine glasses, boat hulls, human bodies and stone pillars are easier to create than in the Detail Editor.

The Forms Editor, however, is not designed to be used instead of the Detail Editor, but along side it. The Forms Editor doesn't provide the same degree of control over the appearance of objects (colour, textures and so on) concentrating purely on creating them. It's therefore common practice to create an object in the Forms Editor, and then import it into the Detail Editor for finishing off. However, although it's possible to import an object created in the Forms Editor into the Detail Editor, the reverse is not possible. So keep a separate copy of any objects created in the Forms Editor, even calling them a different name to disassociate them.

The Forms Editor can appear rather complicated, mostly because there are three ways of using it: these are determined by the use of either 'Forms' or 'Spaces'. I can guarantee you though that if you work your way through this tutorial you'll soon be totally at home.



Spacer objects

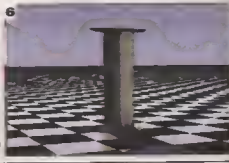
We'll start by creating some objects which do not vary along their length. Imagine you have cut a particularly shaped hole in a piece of plastic and then squeezed some modelling clay through it. You'll end up with a tube of clay which has your shape all long its length. As an example, here's how to make a stone pillar. We'll define the object in the Forms Editor, and then load it into the Detail Editor, apply a texture and render it.

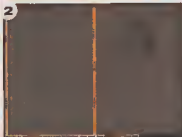
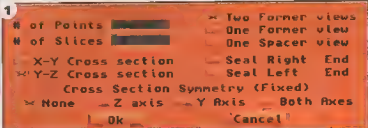
1. Go to the Forms Editor, and select 'New' from the Object menu. You'll see this requester appear. Copy the settings from this one into your own requester. It will create a long cylinder, closed at both ends and use symmetry options to make editing easier.
2. When you click on OK, you'll see an image like this. It looks like a tube with two pointy ends. It's the points in the top left window which we are interested in now though.
3. Click and drag the points shown in the top left window. You won't need to select move or anything: unlike the Detail Editor, the default action is to move the points. You won't need to move them all as the symmetry option will make it easy.
4. To remove the points, click and move the two points at the end of the line in the bottom left window, and drag them to the same level as their neighbours. You won't be able to move them left or right, only up and down.
5. Now save the object, and load it into the Detail Editor. There you can



stretch it, and apply a suitable texture, such as concrete. Remember to save the object from the Detail Editor under a different name, as only objects saved from the Forms Editor can be loaded back into the Forms Editor.

6. A stone pillar, created in the Forms Editor, tweaked in the detail editor and rendered in the project editor.





Two former objects

This last class of object is the most tricky to work with, because it allows a great deal more freedom. Rather than having only one profile (normally shown in the bottom left window) there are two profiles. This makes it easy to get totally confused. It does allow you to create much more complicated models though, as we'll see. For example, we'll make an object which could become the body of an aeroplane, with a little more work. Notice how this time the object is



being worked on horizontally!

1. Go to the Forms Editor, and create a new object. Copy these settings, and make sure you have checked the "Y-Z Cross Section" option. This changes some symmetry settings, but we'll turn them off to start with.

2. Again, the starting point is a sphere. Note however that all four views are active, and that the shape of the cross sections is defined not in the top window, but in the bottom right.

3. The first thing to do is to flatten the cross-sectional shapes. This will give you 'plane' a flat base, and it will also help you to see what exactly is going on with the object. Alter the points in both the left and right bottom views, like this.

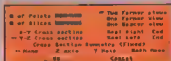
4. Now you can define the length of the object in the upper view. Drag out the points to form the points at which the cross sections are defined along the length of the 'plane' body. Do this in the top left and bottom left windows.

5. The first fuselage is a little odd looking (well, mine is!) but with the addition of some wings (added in the Detail Editor) it doesn't



Perfect symmetry

Whether you use Former or Spacer objects, you'll come across different cross-section symmetry options, as shown here, highlighted in the New Object requester.



To see what difference the settings make, drag the points which make up a cross-section in the top-left window. Here's what you'll see depending on which option is selected:



None - When you select this option, every point you move will move independently.

X - Objects mirrored around the X axis will also move when you change X.



Y - Objects mirrored around the Y axis will move when you select Y.

Both - Objects mirrored around both axes will move independently enough.

Note that the 'Y' in the above examples will only be an 'X' if the 'X-Y Cross Section' is selected. This is the default, and is designed for vertical objects like bottles and pillars. If the 'Y-Z Cross Section' is selected, the 'X' will change to a 'Z'. This mode is mostly used for horizontal objects such as boat hulls or aeroplanes.

look too bad. Using the Forms Editor has produced a very smooth object, which would have taken a great deal longer if constructed solely in the Detail Editor.

6. This rather frightening jet plane prototype was built in the Forms Editor.

Imagine 4.0 Manual Offer

**GET YOUR
OFFICIAL
IMAGINE 4.0
MANUAL
NOW!**

Awesome renders and animations are easy to knock up with Imagine 4.0 when you know how. Get the best from this amazingly powerful package by ordering the official manual from its creators Impulse. No more fishing around one menu after another in search of that elusive feature and goodbye to scratching your head as you try to figure out what 'that' button does ...



Once you have the manual to refer to you'll be able to make the most of this wonderful 3D rendering package.

This offer is being handled directly by Impulse Inc at their USA headquarters. For further information you can contact Impulse by phone, fax, mail or Email at the following:

**Impulse Inc, 8416 Xerxes Avenue
North, Brooklyn Park, MN. 55444, USA**

Tel: (001) 612 425 0701

Fax: (001)-612-425-0557

Email: sales@ceolfun.com

- ☐ Please send me one Imagine 4.0 manual.
☐ I enclose a cheque/money order for £25
 plus £3 sterling post and packaging

Name

Address

Country

Send this coupon with payment to Imagine 4.0
 Manual Offer, Impulse Inc, 8416 Xerxes
 Avenue North, Brooklyn Park, MN. 55444, USA.

Why Apple?



One day we may see the rebirth of the Amiga with a PowerPC processor and other new features to enable it to compete again with today's systems. Sadly though, more than two years since Commodore's demise, very little of substance has happened. We've seen prototypes and promises, but that's about it.

Perhaps some can wait for the final outcome, but if you need more performance, without paying the earth - and you need it today - there's one real alternative to consider now.

Only Apple can offer you both desktop and portable computers that truly match the ease of use the Amiga brought to your desktop. Affordable Apple Macintosh systems have PowerPC RISC processors with thousands of off-the-shelf programs available in areas where the Amiga was previously so strong.

And, if you need to have the most compatible of all computers, Macintosh is currently the only system that can run MacOS, DOS and Windows applications via optional DOS Cards or SoftWindows.

Why Macintosh?

Performance

All Macs are PowerPC based (except PowerBook 190c). Even entry level systems run at 100MHz or 133MHz, with 380MHz powerhouses and 180 Mhz multi-processor systems at the top of the range.

Apple is the only mainstream computer company who has been able to make the transition from the older GISC (complex instruction set computing) processors to the newer and faster RISC (reduced instruction set computing) processor technology - while still retaining full backward compatibility with previous software. Recent 686, Pentium Pro & 68020 are nearly 250%

The Internet & Communication

- All Macs are internet ready; many include a 28000bps modem with full send/receive fax and microphone management facilities.
- Industry standard web-browsers, Netscape Navigator and Microsoft Internet Explorer, were developed for the Mac. Both give full access to all Web sites with new internet page layout features like auto-tables and on-screen movies.
- The Internet's standard format for video files, called QuickTime (or QuickTime for Windows) was an Apple development. Of course it comes as standard with every Mac.

Connectivity & Expandability

- All Macintoshes have networking built in as standard, so connecting systems together and adding shared printers etc. couldn't be easier.
- All Macintoshes have an external SCSI connector as standard (except iMac) - adding external drives, cartridge drives, scanners etc. really is Plug-and-Play.
- Low-cost digital cameras can be plugged into the Mac for instant real image export.
- Increasingly industry standard PC cards can be used in all Mac systems from the 5400 upwards.

Education & Educationware

- Many quality Macintosh titles are widely available. Duxbury Knowledge offers superb titles like The Ultimate Human Body and History of the World while Macmillan publish Encarta, Cinemascope and Discoveries.
- Because Macintosh is the preferred system within many educational establishments, high quality software is assured.

Multimedia

- Apple is the World's No. 1 Multimedia PC vendor.
- All desktop Macs have a fast CD-ROM drive as standard (portables get optional CD-ROM units).
- In 1995, 47 of the top 50 selling CD-ROM titles worldwide were developed on the Macintosh.
- Many Macintoshes have built-in TV with selected TV clips can be recorded directly to disk as QuickTime movies.
- Many Macintoshes have built-in video in and out, for direct recording to VCRs.
- Some Macintoshes have external digital video editing facilities as standard, others can be upgraded to include the facility with care.

Recreation & Games

- Top games like The Ultimate Doom, Myst, Rebel Assault II, Dark Forces, Descent, Airtelife, Lost Eden, Legend of Kyrandia, Ball Throats and The Dig, have all been developed for Macintosh.

Output & Presentation

- Connecting and using colour printers (from Typewrite, HP, Apple and others) to Macs is as easy and the results are truly outstanding.
- Many software packages are available offering image manipulation and superb photo quality output.

Software choice

Over 1,000 native software packages (written specially for PowerPC Macs) have been shipped since Power Macintoshes were launched in 1994 - plus there are thousands of existing programs which can also be used. Industry standard programs such as Word, Pagesetup, Word Perfect, PageMaker Pro, Excel, Quark Xpress, Photoshop and many others have all been developed for the Mac.

Creativity

- Macintosh still dominates the creative world with an 80% market share in creative publishing.
- 65% of post-production video editing is on Macs.
- Macintosh is the most widely used system for the creation of internet web pages.
- Most magazines (probably the one you're reading right now) are created on Macintosh.



MacOS



My 5400 Mac Macintosh



OctaMED SoundStudio

PART
1









Hello and welcome to the first in the series on this month's wonderful SoundStudio cover disk, the ultimate Amiga music package.

With this SoundStudio tutorial series we'll be ramping up very quickly to an advanced guide to this unrivalled music program. You'll find a few other SoundStudio related articles throughout this issue of CU Amiga Magazine: page 56 for loading instructions, page 61 for a quick introduction and page 20 to get an idea of its many different powerful features. If you've never used a tracker before, see the panel opposite which explains the basic idea of how the tracker section works.

For now we'll take a look at each of the pull down menus to see what they do. Next month we'll begin a tour of each of the main sections of SoundStudio.

Project menu

This is mostly concerned with input and output. New: clear the current song. Open: load a new song. Play after loading: option to automatically play a song on loading. Save: save the song to disk. Save timer: set the delay of the automatic save timer. Delete files: remove files from a disk. Print: print out the song data (or send to a text file). Command Shell: open SoundStudio's ARexx command interface.

Project	Display	Song
New...		
Open...		
Play After Loading		
Save...		
Save Timer...		
Delete Files...		
Print...		
Command Shell...		
ARexx Script...		
AmigaDOS Shell...		
Last Message		
Online Help...		Help
About...		
Audio Channels		
Quit OctaMED...		







ARexx Script: select an ARexx script to be executed. AmigaDOS Shell: open a normal AmigaDOS Shell on the SoundStudio screen. Last Message: display the last message output by SoundStudio. Online Help: call up the on-line help document. About: find out about this particular version of SoundStudio. Audio channels: turns the Amiga audio channels on or off, handy for use with other audio software. Quit OctaMED: close down the program.

Display menu

All the selections from this menu call up specific control panels. If you accidentally close or lose any of the main control panels you can always open them again from this menu. The menu speaks for itself really each selection opening the corresponding editor.

Song menu

Select: select which song you are currently working on (SoundStudio can have more than one song resident in memory at a time). Add New: add a new song to those currently in memory. Delete Last: get rid of the last song. Playing Sequence: open the playing sequence window in which blocks are strung together to make a song. Section List: brings up the Section List. Set Options: a number of overall song options can be set from here, including the number of channels/mixing mode and also the song's name (not the same as its filename). Set Volumes: offers a bank of sliders controlling the volume of each track. Set Annotation: extra notes can be tagged onto the song here to be displayed when loaded.

Display	Song	Block	Tr
Tracker Editor...			
Notation Editor...			
Main Control...			
Information Window...			
Tempo window...			
Synth Editor...			
Sample Editor...			
Sample List Editor...			
MIDI Message Editor...			
Input Map Editor...			
ARexx Trigger Setup...			

Block	Instr	Edit	MIDI	Setting
Instrument List...				
Type...				
Set Properties...				
Load Instrument(s)...				
Load from List...				
Save Instrument				
Flush Current				
Flush All unused				
Automatic Flush				
Add Path				
Remove Path				
Halve Loaded Samples				
✓ Load Samples to Fast Mem				
Move Samples to Fast Mem				
Move Samples to Chip Mem				

Block menu

These options deal with processes that affect the whole of the current block. New: create a new block. Delete: delete the current or last block. Set Properties: set the number of tracks in the current block along with other attributes. Block List: display a list of all blocks, useful for finding specific blocks. Highlight: alternating lines of the block can be highlighted to make editing easier and the gaps between the highlights can be set to any number. Cut, Copy, Paste: cut, copy or paste the current block. Swap w/buffer: switch current block with the one in the buffer. All Cmd Pages: work on all command pages (see the docs for details of command pages: a great feature we'll cover in a later issue). Insert Line: add a line to the block from the current cursor position. Delete Line: delete the line at the cursor position. Expand/Shrink: expand or shrink the block by two or a specified amount. Split at Cursor: split the block into two. Join With Next: tack the block onto the front of the next one.

Track menu

This is a quick and simple little menu that holds the cut, copy, paste and delete controls that affect the track occupied by the cursor.

Instrument menu

From here you can access all the controls that deal with instruments. Not just samples, but MIDI instruments, external samples and synth sounds. Instrument List: a quick way to select any currently loaded instrument. Type: set the type of the current instrument. Set Properties: change properties of an instrument such as loop settings, fine tune and transpose values, plus MIDI settings for MIDI instruments. Load Instruments: load an instrument from disk. Load from List: load an instrument from the sample list selector. Save Instruments: Save

an instrument to disk. Flush Current: remove instrument from the song and memory. Flush all unused: remove all instruments from memory that are not used in the song. Automatic flush: determines whether you're asked before unused instruments are flushed when New is selected. Add Path: includes the path of loaded instruments in their name. Remove Path: removes paths from instrument names. Halve Loaded Samples: option to reduce samples to half volume automatically on loading, useful for the old style 8-channel mode, not much use otherwise though. Move Samples to Fast/Chip Mem: samples can be switched to fast RAM when in Mixing mode, allowing for much larger samples. Samples for a song cannot be shared between Chip and Fast memory, hence the option to move them all

Edit menu

Most of the editing functions not contained in the Block or Track menus can be found here. Cut/Copy/Paste Range: performs these functions on a selected area (range) of the current block (drag out an area with the left mouse button to define a range). Paste to Selected Tracks: pastes the range copy buffer onto the selected tracks (jumping any unselected tracks - use the number buttons above tracks to turn them on or off). Erase Range: clear the selected range. All Cmds Prgs: apply changes to all command pages, or not if it's turned off. Discard Copy Buffers: flush the copy buffers. Transpose: calls up a comprehensive transpose control panel for shifting blocks of notes up or down in pitch. Replace Notes: a kind of search and replace function. Range Current Track: set the range to the current track. Range Current Block: set the range to the whole block. Re-mark Range: moves the cursor to the start of the range. Spread Notes: spreads the notes in the range across consecutive tracks to the right of the range. Pitch Slide: creates a pitch slide between the current note and the next in the track. Volume Slide: inserts volume changes to ramp from the current instrument's volume to that of the next. Generate Slide: generates a transition between any two command values in the track. Note Echo: turn this on to generate echo effects automatically with repeated notes inserted at lower volumes in the track.

MIDI menu

Of course this is where most of the MIDI settings are made, except for individual MIDI channel and preset settings for each instrument (which are set from the Instrument Properties section). MIDI Instruments can be mixed in the same songs with samples. MIDI Active: turns on MIDI mode. Input Active: turns on the MIDI input. Slave Mode Active: turns on a new mode in which one Amiga running SoundStudio is controlled like a MIDI module from another MIDI instrument (which could be another Amiga running SoundStudio or any other software). Input Channel: selects the channel on which MIDI input will be read (not for MIDI Slave mode). Ext Sync: turns on an alternative remote control mode in which another Amiga running SoundStudio or OctaMFD can start and stop the song on its Amiga. Send Sync: sets up this Amiga to act

as the master in such a situation. Send Active Sensing: sends out periodical messages saying "I'm here and listening" to any connected MIDI devices. Read Key Ups: a 'note off' command will be inserted when you release a key on a MIDI instrument during recording (also works with the Amiga keyboard). Read Volume: reads and records initial velocity data as volume data from touch-sensitive keyboards. Immediate Preset Change: sends a preset change MIDI message immediately if a MIDI preset is changed in the Instrument Properties section, otherwise a preset change message is sent when that instrument is next played. Reset Pitch/Presets: sends out reset messages for all pitch bends, modulation wheel and preset values. Send MIDI Reset: sends out a MIDI reset message. Send Local Control: sends out a Local Control On/Off message. Note Killing: selects one of two kinds of methods for turning notes off. SMF Load Options: calls up the window dealing with loading Standard MIDI Files. Controller Commands: set options for MIDI controllers.

Settings menu

Various preferences and settings are accessed here. Mouse Options: allows you to change the functions of the mouse buttons. Keyboard Options: various keyboard configuration options. Programmable Keys: set up functions for the programmable keys. Keyboard Shortcuts: these can be re-defined and added to. Mixing Settings: calls up the all-important mixing settings for your chosen output device. Aura Sampler: specific options for use with Aura. Equalisers: choose from a couple of 'equaliser' type displays. Miscellaneous: a bundle of settings that don't fit anywhere else. Screen: change to any available screen mode

Instr	Edit	MIDI	Setting
Mouse Options...			
Keyboard Options...			
Programmable Keys...			
Keyboard Shortcuts...			
Mixing Settings...			
FastMemPlay...			
Aura Sampler...			
Equalizers			
Miscellaneous...			
Screen			
Auto-Freeze Screen			
Palette...			
Font...			
Windows			
Load Settings...			
Save Settings			
Save Settings As...			

of your choice. Auto-Freeze Screen: switches on automatic screen freezing. Palette: customise the screen palette to your taste. Font: select new fonts, useful if you've changed screen modes. Windows: snapshot tools for the windows. Load/Save settings: store or recall all the settings via the default settings file or create any number of alternative settings files. ■

Tony Horgan

The tracker

Listen up! Trackers are much simpler and easier to use than you think. It looks like a bunch of alpha-numeric garbage but when you know what you're seeing it makes sense. In SoundStudio, a song is made up of a series of blocks. These blocks are put into order within the Playing Sequence section and can be in any order you like, the same blocks repeated as often and where ever seems appropriate. Blocks are made up of anything from 1 to 64 tracks. A track is displayed as a vertical column in the block and consists of three main parts. The first specifies the note, such as D45, which is D Sharp on octave number five. Next to this on the right is a number or letter which signifies which instrument is being played. Finally there are four digits which hold information for the command parameters. These are for editing effects to the sound as it is played. The first two of these digits indicate the type of effect command, while the remaining two are the parameters for the effect (eg how much of the effect is used on the instrument).

When you play a block or song, the sequence scrolls up the screen. When some instrument data passes through the centre line it's played by the computer. A handy shortcut for moving from one block to the next is to use the Shift key with the Up and Down cursor keys.

If you need to know more about the fundamentals of trackers and Amiga audio in general, dig out Dr Horgan's Complete Guide to Amiga Music and FX, the free book given away with the May 1995 issue of CU Amiga.



Wired World

Worried that the government or anyone for that matter is spying on your Emails? Don't fret here's a way to keep your mail safe from prying eyes and keep your privacy in tact.



A fact which may not be commonly known, is that Email is sent as raw uncompressed text around the world. And any service provider from your own to any other system between yourself and the destination can read that Email. Whether this bothers you or the chances of this being likely could be the topic of a separate feature but right now we'll concern ourselves with a way around it. PGP (Pretty Good Privacy), a universal cross-platform 'public key' encryption system, is one solution. What does this all mean? Well it's time to find out.

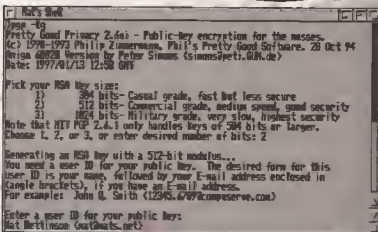
All jumbled up

The most basic form of cryptography is to take some data and scramble it in a particular way so that it's essentially meaningless. If the exact operation is known, the scrambled data can be unscrambled and the original material regained. This isn't much good unless the only people who have the encryptor are the people exchanging data. Public Key systems are much more complex beasts where the theory is that you must have a 'key' from one party to encode data for them. The key itself isn't important and can be sent out via unsecure means.

To decode a PGP'd message, you will need two keys: the public key for which the data was encrypted and the secret key which belongs to the public key. The secret key is never sent anywhere, residing on the hard drive only. And for the last level of protection in case the local computer is compromised, a pass-phrase must be used as well. It may sound complex but when it's working all you need is to exchange Emails with tiny usencode-like public keys so mail can be sent encrypted.

Complex commands

PGP is a CLI executable with some rather complex commands to perform various functions. The first step of installation is to extract the PGP archive to somewhere onto your hard drive. We are working with the AmigaPGP 2.6.3i distribution which can be found on Demom's FTP site at http://demon.co.uk/~d3/amiga/util/crypt/pgp/amiga_2.6.3s1a. If you have the CD issue, you can find a drawer called PGP in the



A new key pair generating a public and secret pair of keys made up of 512 bits with our name and local address. It's best to use either 384 or 512 as you 1024 key size, 1024 is overkill and is a bit too slow.

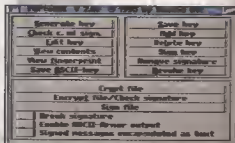
Wired World dir in the magazine section. After deciding where you want to install PGP, create a directory called PGP in that drawer and copy the contents of the 'bin' directory from the archive into it. Next you will need to set an ENV variable for the path where PGP is installed. For this type the following in the shell:

```
SETENV PGPPATH Workbench:PGP
COPY ENV:PGPPATH ENV:ENV:
```

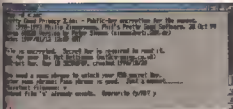
Make sure Workbench PGP is changed to the path where PGP has been installed. Now in our PGP directory we have 'PGP263i-000' and 'PGP263i-020' for the 68000 and 68020 CPUs. You should pick the version relevant to your CPU, rename it to just plain 'PGP' and copy somewhere in your AmigaDOS path. A safe bet would be the C: assign. For example:

```
CD workbench: PGP
rename PGP263i-020 PGP
copy PGP C:
```

Now you should be able to simply type PGP in the shell and have it report back the correct version. We're now ready to get started so we have to generate a secret and public key. Enter PGP -kg in the shell. PGP will ask you what size key you would like to use. Only choose 384 or 512 bits as 1024 is too slow. Next it will want a user ID. The format for this generally matches something like, 'Joe Bloggs <joe@blogs.com>'. Insert your ID in this format with your own Email address etc and hit



A flow in PGP to GUI's interface, you can see how there are quite a few buttons that perform the most basic PGP operations.



A key PGP can use to encrypt & file is fully straightforward. All you need to do is enter your RSA secret key and you're sorted.

return. Next PGP will ask for a pass phrase. Choose something you won't need to write down and you won't forget as you'll need it every time to access PGP. If you forget it, your keys will be useless. PGP will ask for it again to confirm that it got it right since you can't see what you're typing at this point.

Now PGP will want a random bunch of key presses to initialise a random-seed file. This is a technicality so we won't go into it, just type until the number ticks down to 0. PGP will then spend some time creating your keys. All we need now is an ASCII version of our public key and to generate this, type,

```
PGP -kza <ID> mykey.txt
```

Change ID to a part of your own user ID. PGP does a wildcard match, for example I just use 'mat' and it picks my key. You should now find that you have a text file in the current directory called mykey.txt. Place this somewhere where it's easy to include into Emails and such forth. Have a look at it in a text editor or type mykey.txt to take a look at your very first PGP public key! This little bit of text is what you need to send to other people so they can encrypt data to you so you may use any mechanism to distribute it you like, on your home page? (Make it a click-on link so visitors can save it out and add to their public key-ring)

Now we'll try a quick test so we can see everything is working OK. Type a little message in a text editor and save it as ram-message.txt. Now run through the following;

```
CD ram;
PGP -e ram-message.txt
```

When PGP asks for a user ID, enter your own. Now you'll have a file called message.txt.asc.

```
type message.txt.asc
```

See the encrypted text file

```
delete message.txt
PGP -d message.txt.asc
```

Enter your password when PGP asks for it and the file will be decrypted.

```
type message.txt
```

The message has been successfully decoded

In this way we can use PGP to encrypt any file be it text or a binary to another PGP user but first we'll need their PGP key. You can

obtain my PGP key from both the floppy disk (called mat.pgp) and on the CD in the Wired World directory again. To add a public key to your public key-ring, firstly you'll need to clip out the uuencode-like public key from an Email and save it into The syntax for PGP is PGP -ka <keyfile> so you can add my PGP key to your keyring by;

```
PGP -ka mat.pgp
```

You'll be asked how well you trust that this key belongs to the person it is supposed to. This is a bit overly technical, mainly you just answer YES. You can view your collection of public keys by typing PGP -kv and even extract those people's PGP keys from your keyring if you need to pass them to someone else.

There's quite a bit more to driving PGP but that's the basics and we'll get you by managing your collection of public keys, encrypting and decrypting Email. See the documentation provided for further information. In-particular readers with the cover CD can find useful concise information in AmigaGuide form in the PGP directory. Next we'll look at a couple of utilities to make using PGP much easier.

PGP helpers

PGPtoGUI is a stand alone GUI interface for PGP. It handles everything from public key management to actual encryption/decryption. It can be found on the Amnet in the path util/crypt/PGPtoGUI2 De la and of course on our cover CD in the PGP directory again. After extracting the archive, all that's needed is to copy one of the two icons supplied as an

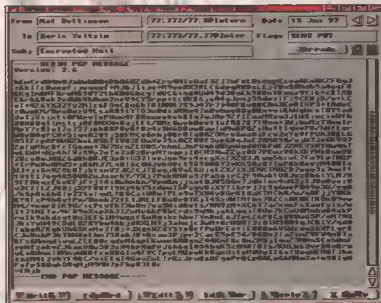
.info for the executable called PGPtoGUI2.0e. Then choose preferences from the project menu and configure the full path to your PGP executable.

PGPtoGUI can even be used to generate your initial secret and public key pair if required. The buttons are pretty self explanatory but again you'll need to save out all of your encrypted Emails and such forth as text to pass into PGPtoGUI. The same goes for encrypted mail, the encrypted text will have to be generated and then included into an Email in your Email client of choice.

What would be more useful would be to use PGP transparently right where it's needed, that is in your text editor. I use the commercial Cygnus Edit package which has an excellent AReox port and there happens to be some great AReox scripts specifically to drive PGP. Unsurprisingly they can be found on the Amnet in util/crypt/CEDPGPtha and of course on the cover CD in the usual place. I did find that all of the scripts required editing so that the line which says pgp = 0 must be changed to pgp = 2, this sets the PGP version to what we are using.

Once this is done, the scripts are easily added from CED's 'special' menu and the AReox/DOS interface section. Encrypt and Decrypt are just added to function keys. Even if you don't have Cygnus Editor there's a host of great shareware AReox capable editors available. With a little work the scripts could be modified to run on those for transparent PGP usage.

If you've any suggestions for what you'd like to see in Wired World in the future, please let me know and drop me an Email to mat@mat.net. ■
Mat Bettinson



A PGP encrypted mail now doesn't look like the data, but here the data has with a quick look at a mouse, the user will be shocked and hear their mail get out without undue events and they will be sure the data



Not God speaks

If you remember, the Amiga supported the PNG file format in web browsers before any of the big PC boys did. And as usual CU Amiga Magazine (or my column, in fact) was there to tell you about it before anyone else.

Unfortunately, there's proprietary technology abounding on the PC Net scene which generally means Amiga support will never be forthcoming. When I say proprietary technology I am talking about RealAudio which is a schema for audio to be spooled over the Net to your computer. The authors of RealAudio have turned on Amiga port down flat. However, all is not lost as it turns out that there's a new audio format called MPEG 'layer 3' which has better specifications and better still it's not proprietary. It's coming into increasing use as a spooling form on the Internet, so all we need is an Amiga implementation. Luckily, iBrowse's author Stefan Burstrom is working on it, so that's good news!

Surf's up!

Viscorp's set top box didn't see the light of day but Sony's did. New improved Voyager hits the streets and Miami gets SANA2.

Web TV discussion

Sony's WebTV has been causing a stir on the Amiga's busiest Usenet newsgroup, comp.sys.amiga.misc. This unit plugs into your living room television and allows browsing of the WWW. Sound familiar? Obviously the WebTV beat Viscorp's 'ED' set-top box to the market so it's interesting to Amiga users to see how it is received. There is an interesting discussion to be had on the subject though sadly it's partially swamped with critiques of American computer television programs but it's still worth a look.



Miami gets SANA2

Although promised for Miami 2.0, SANA2 support has been added to a public Beta version of Miami 1.6 x and should be fully debugged by the time the betas reach 1.9 x (as was T/TCP support, see Voyager article).

For those that don't know, SANA2 is the Commodore networking standard for interfaces which connect to networking or TCP/IP software including Envoy, AS225, AmiTCP and now Miami. This means that Miami can now be used with an Ethernet board or any other networking device that has a SANA2 driver. AmigaNet and MagPLIP for parallel Amiga to Amiga use, are two more examples. Too many other changes and enhancements have been added to Miami to document here, but one thing is sure, it's a TCP/IP stack the Amiga can be proud of. Point your web browser to <http://www.emneca.com/~krusa/amiga/Miami.html> for more details and the latest version



Voyager is looking good and now its available as shareware

Contrary to the belief that work was floundering due to Oliver Wegner's commitments to the MicroDot II project, Voyager has received numerous additions to its features list since its public 1.0 freeware release and now its been made available as shareware.

Just before going to press, the big news was that Voyager has just gained support for Frames. This brings Voyager's current feature list to include: HTML 1.0, 2.0 and 3.1, Internal Image decoding for progressive on-the-fly image loading for GIF and jpeg, Anim GIF support, HTML 'Tables' and many more 'Netscape-like' supported such as FONT SIZE and HR WIDTH. Voyager also has improved compatibility with broken/nonstandard HTML code.

Another new feature is T/TCP (TCP for Transactions) which allows much faster HTTP links to servers. This is only currently supported by Miami 1.9.x beta versions and web servers supporting T/TCP themselves (quite a few). A new preferences page is included with sub-pages similar to iBrowse's preferences. Shift-click downloading of files to disk added. Internal SMTP send capability for mailto; and mailto: forms. Improved news handling.

So far it looks like Voyager is the most complete browser on the Amiga at the time of going to press though the authors of AWeb and iBrowse promise Frames support in the next versions of their software. Voyager also only costs only £15, less than half of the £35 which iBrowse and AWeb 2.1 cost.

Call Active Software on 01325 352260 for registration details or Email them on active@enterprise.net. You can also find a 'reg tool' on the Vaporware WWW site at <http://www.vapor.com> which will aid registering all Vaporware software in any country. Latest details are on Vaporware's web site: <http://www.vapor.com/voyager/>



Surf of the Month

Handing him his packed lunch for sustenance, we sent one man into the Net for a day of discovery. Here's what he came back with.

Back on our screens for its seventh series, **Red Dwarf** is as popular as ever, especially among the Internet community, even if it does seem to have made a few compromises this time around. If you're a fan of Kryten, Rimmer, Cat, Holly and Lister, chances are you've already thrown Red Dwarf into a search engine and received a throng of web sites dedicated to the unlikely sci-fi sitcom. Either way, a good place to start is Andree's Brill-Smegging-Blatant Red Dwarf Home Page. This site itself doesn't have a huge amount of stuff on it, but it does serve as a neat introduction and offers plenty of links to other Red Dwarf pages and links.

A little closer to home but still with a tenuous space/earth orbit kind of theme, information from **The Met Office's** weather satellites can be accessed from their own web site. The Met Office site offers weather reports and forecasts for the UK, up to date pictures of the UK and Europe from geostationary satellites and links to other weather related web sites. It also has a section for job vacancies at the Met Office. Compared to some American weather sites it's a bit of a poor effort, but I suppose that's the difference between a British government institution and the Yank's whizz-bang approach to the media.

While most of the northern hemisphere looks forward to warmer times, snowboarders will be hoping for a good covering of the white



stuff across the world's ski resorts. If you're one of the growing numbers of people gearing up for a session on the slopes, why not get yourself in the mood by visiting a few snowboarding web sites. The Finnish-run Snowbird's **Snowboarding** Page is home to all kinds of pictures, info and links for those who like to slide down icy hills on small ironing boards. World rankings, a decent picture library and a chat forum are among the many features on offer.

Fancy a bit of childish escapism? There's



always the **Disney** site. As you'd expect, it's one of the better looking sites and has lots to keep you occupied. Unfortunately, much of it requires specific PC web browsing software to use properly, but the story books work fine (but, don't get too depressed - take a look at the new version of *Voyager* - it's hot on the heels of current PC browsers). Anyway, the Disney site is nice and colourful and doesn't hit you as hard as you might



YAMAHA

one store

http://one.store.co.uk

expect with all the sales patter and adverts.

Most of us would like to be able to see into the future. Surprisingly, some claim they can. Even more surprisingly, even more people believe them! If you want your digital palm read, try hooking up to the **Daily Zodiac Forecast**, but don't blame us if what they tell you turns out to be a load of cobblers.

You've probably read all about **QuikPak's** bid for the Amiga in this month's news section, but if you want to know more you can hook up to their site where you can read an open letter to the Amiga community from QuikPak's bosses, and also check up on their latest plans for new Amiga models, which include a bizarre 'luggable' Amiga based on an A4000T with a flip-up LCD screen.

One site worth dropping into on a regular basis is the **Amiga Web Directory**, which as its name suggests, offers links to all kinds of Amiga-related web sites. It's also home to an excellent Amiga news service and is backed up by an Amiga web site search engine. With no official Amiga body to quiz about the machine's future, this is a valuable forum and definitely one to bookmark.

If this month's SoundStudio covermount has got you in the mood for a bit of composing, take a look at the **Yamaha** site for details of their extremely wide range of MIDI and recording gear. They've got everything from the cheapest multitrack sound modules right up to cutting edge mono synths. Still on a musical theme, **Roland** have a very impressive site with an interactive MC-303 that makes sounds as you tweak its buttons and knobs, but only if you have a system capable of RealAudio, which rules out any Amiga browsers unfortunately. If you're looking for a mixer you're bound to find one to fit your requirements and your budget on the

Spirit site. They've got models starting at under £200 right up to great big professional studio models.

Maybe you'd rather just buy some music on CD rather than making your own. If so, the **One Store** site could be just what you need. It's an on-line shopping site that currently is made up of departments selling music, bikes, photographic equipment and educational software - a strange mix indeed. Additional departments are on the way, including videos and games. By the way, it's run by those awfully nice guys at Team 17.

Totally unconnected to that is this page of links to football club home pages. A division of **UKDirectory/sport**, it offers links to pages dedicated to football clubs ranging from Whitley Bay FC to Manchester United via Dunfermline Athletic. However, I was disappointed to find the link to fun sounding 'Arsener', an unofficial Arsenal page, lead to nothing. By tracing the URL back to the main UK Directory you have access to a vast number of sites sorted by subject matter, including business, community, computers, education, employment, entertainment, finance, government, home pages, news, shopping, sports, transportation and travel. Another one to put in your hotlist.

Budding artists and animators can check out loads of good ideas and technique examples at **Emmett Scott's Cartoon Corner**. It's full of ideas to make your own cartoons

Those sites in full

Red Dwarf Links

<http://www.guestline.com/Hollywood/6671/1m6m.htm>

The Mat Office

<http://www.matco.govt.uk/>

Surfboarding Page

<http://www.surfbic.com/>

Daily Zodiac Forecast

<http://www.zodiac1.com>

QuikPak

<http://www.madgogroup.com/quikpak/>

Amiga Web Directory

<http://www.cwcc.org/amiga.html>

Yamaha

<http://www.yamaha.com>

Roland

<http://www.roland.co.uk>

Spirit

<http://www.spirit-by-soundcraft.co.uk>

One Store

<http://www.one.store.co.uk>

Football club home pages

www.ukdirectory.com/sport/football.htm

Cartoon Corner

www.cartooncorner.com

Hard to Find Records

<http://www.hard-to-find.co.uk>

more punchy, effective, and above all just plain funny. There are sections a number of different aspects of cartoon creation including caricature, animation and drawing tricks. It's decorated with neat little cartoon images that, for a change, are stored using only the required amount of colours for fast downloading.

We'll finish up this month with a quick look at the **Hard to Find Records** web site. This is a

Birmingham based shop specialising in rare and deleted dance records. Most of the stock seems to be classics from the world of house and techno, including many imports. You can browse the stock list alphabetically to check if they have your particular tune. If you're not sure of the name of your desired record you can even send them a tape and they'll do their best to identify it and track it down for you. Expect to pay between £4 and £30 depending on the collectability of the particular slab of vinyl.

That's all for now. Happy surfing! ■

Tony Morgan



FREE FREE

UNDERGROUND

P

UNDERGROUND

FREE FREE

UNDERGROUND

ARROW PD

ARROW PD

send three 1st class stamps or a cheque for 75p
Please state work/bench version

ARROW PACKS

Games Creation Pack
This pack is a real gem for you
Space Adventures Pack
Adventure with a space theme
The New Launcher of 70's very popular
series

Arrow-Dynamic Software

Activated You are activated in our exciting
adventures in the planet Earth. There must
be something for everyone at the
Arrow-Dynamic game as you have the software
and money pack, to make your
hobbying on this remarkable planet.
Everyone of the our chapters is a
completely different gaming experience
The Arrow-Dynamic software is a
brand new 20 level as well as more
enhanced graphics and sound. Highly
recommended for all gamers players.
Full Program £4.95

PD TITLES

	80P	80P
	80P	80P
1. The Great	1.00	1.00
2. The Great	1.00	1.00
3. The Great	1.00	1.00
4. The Great	1.00	1.00
5. The Great	1.00	1.00
6. The Great	1.00	1.00
7. The Great	1.00	1.00
8. The Great	1.00	1.00
9. The Great	1.00	1.00
10. The Great	1.00	1.00

COLLECTABLE CARD GAMES

Major: The Gathering Gift Box £24.95
The Gathering Gift Box £24.95
The Gathering Gift Box £24.95
The Gathering Gift Box £24.95
The Gathering Gift Box £24.95
The Gathering Gift Box £24.95
The Gathering Gift Box £24.95
The Gathering Gift Box £24.95
The Gathering Gift Box £24.95
The Gathering Gift Box £24.95

ARROW PD, PO BOX 7, KENT CT15 4AP
Ordering Tel: 01304 832344

1st class postage guaranteed
1st class postage guaranteed

CLASSIFIED ADVERTISERS

ARROW PD.....01304 832344
BERKSHIRE PD.....0589 722502
CLASSIC AMIGA.....0161 7231638
DELTRAX PD.....01492 515981
FOREMATT HOME COMP.....01793 853802
FREESTYLE PO.....01922 710985
FUTURE PD.....01582 36157
FUTURE SOFTWARE.....01232 626694
GLOEN IMAGE.....0181 900 9291
HAGARE ELECTRONICS.....01795 663336
HORNST.....0114 2967825
KEW SOFTWARE.....0181 657 1617
MICRONINE PD.....01443 404599
MUSIC DYNAMICS.....0191 487 4087
NO MERCY PD.....01845 501326
ON-LINE PD.....01704 834335
PD POWER.....0374 150972
PD UNDERGROUND.....01702 295887
SELECT SOFTWARE.....01582 36157
SILCON VILLAGE.....01727 768417

UNDERGROUND
1. The Great
2. The Great
3. The Great
4. The Great
5. The Great
6. The Great
7. The Great
8. The Great
9. The Great
10. The Great
11. The Great
12. The Great
13. The Great
14. The Great
15. The Great
16. The Great
17. The Great
18. The Great
19. The Great
20. The Great
21. The Great
22. The Great
23. The Great
24. The Great
25. The Great
26. The Great
27. The Great
28. The Great
29. The Great
30. The Great
31. The Great
32. The Great
33. The Great
34. The Great
35. The Great
36. The Great
37. The Great
38. The Great
39. The Great
40. The Great
41. The Great
42. The Great
43. The Great
44. The Great
45. The Great
46. The Great
47. The Great
48. The Great
49. The Great
50. The Great
51. The Great
52. The Great
53. The Great
54. The Great
55. The Great
56. The Great
57. The Great
58. The Great
59. The Great
60. The Great
61. The Great
62. The Great
63. The Great
64. The Great
65. The Great
66. The Great
67. The Great
68. The Great
69. The Great
70. The Great
71. The Great
72. The Great
73. The Great
74. The Great
75. The Great
76. The Great
77. The Great
78. The Great
79. The Great
80. The Great
81. The Great
82. The Great
83. The Great
84. The Great
85. The Great
86. The Great
87. The Great
88. The Great
89. The Great
90. The Great
91. The Great
92. The Great
93. The Great
94. The Great
95. The Great
96. The Great
97. The Great
98. The Great
99. The Great
100. The Great

DOCK COST £1.30 EACH, NO MINIMUM ORDER, ALL VOLUMES FREE AND UNDER FRIENDLY
all games are in 1 disk and run on all Amiga's software available
UK prices are in £1.30 each and run on all Amiga's software available
UK prices are in £1.30 each and run on all Amiga's software available

UNCOMPROMISED PD 54 CARMONA ROAD, SHOCKLEY WY 55, GERRA 553 972, TEL 01788 8887

Name: _____
Address: _____
Postcode: _____

HOW TO CREATE TOP CLASS AMIGA GAMES WITH YOUR MOUSE!

Have you ever dreamed of creating your very own Public Domain or Commercial software products without having to program?
Well now it is no longer a dream - it's REALITY!

REALITY - THE ULTIMATE SOFTWARE CONSTRUCTION KIT is a REVOLUTIONARY new product from B.P.M. Promotions, a company involved in the AMIGA software market for over five years. This product is a BREAKTHROUGH in software design and allows anyone with an AMIGA computer, regardless of their age or intelligence, to create both Public Domain and Commercial software products in virtually no time at all using nothing more than their computer's mouse! It can be used to create games, demos, educational software etc, much much faster and easier than ever before throughout the history of computers! REALITY is like nothing you've ever seen before on the AMIGA. Now for the first time you can access the awesome power of your computer with bewildering ease and use it to create TOP CLASS AMIGA software in few days by doing nothing more than clicking the buttons on your mouse or moving the mouse cursor around the screen - that's it! It's so easy you will not believe it! No programming is required whatsoever!

Here is a small example of what you can achieve in minutes with Reality by using nothing more than your Amiga's mouse:

- Create HUGE fully detailed scenery back grounds for your games using the Background creation editor!
- Make your games main character shoot all sorts of different weapons each with different power values!
- Define monster attack patterns and choose from the HUGE amount of already made variations!
- Create intelligent enemies that home in on your main character!
- Add text messages to the software with hundreds of different styles of text fonts to choose from!
- Create SUPER intelligent GIANT mid level and of level monsters just like the very best commercial games!
- Produce scenery that your main character reacts to: Ladders, Ropes, Platforms, Traps, Switches etc!
- Define complex puzzles to make your games much more interesting!
- Make other games characters that your main character can interact and communicate with!
- Select and define all sorts of weapons, bonuses and objects that your main character can collect and use!
- Create characters that have to fight each other in a beat 'em' up - STREETFIGHTER II style!
- Produce ALL sorts of demo effects from groovy text scrollers to on screen 3D rotation just like the very best PD demos!
- Create Educational software from a simple slideshow to a full blown disk magazine!
- Add graphics, music and sound effects to your software with ease!

THE LIST IS ENORMOUS!!! - Test your software in seconds to see if everything is working the way that you want it! There's no need for any slow compiling or testing like certain other packages!

REALITY can be used to create many types of different software products! It's ideal for TOP notch games! Create HIGH speed shoot 'em' ups, Addictive scrolling platform games, Beat 'em' ups, Point and Click Graphic Adventures, HUGE Arcade Games, Puzzle games, Racing games, Card games and much much more! Even create your own mind-blowing special effects demos or user friendly Educational software! Just look at the screenshots in the advertisement and see just what this system is really capable of!

Over four man years of work has gone into the development of this Software!

The result is:

A STATE OF THE ART SOFTWARE CREATION SYSTEM!
It's versatile - it's easy to use - it's incredibly fast - it's the biggest ever breakthrough in Amiga software creation and has already been used to create twenty commercial games and a multitude of PD software!!

If you can use an AMIGA you can use REALITY! All the hard work has been done for you! With once complicated programming routines reduced to simple mouse actions that anyone can understand! That's the hidden power of REALITY! Absolutely no knowledge of programming is required whatsoever! Reality is so easy! It is a completely new way of creating software!
MORE THAN TEN 80% SCORES HAVE BEEN AWARDED TO REALITY SO FAR FROM MANY DIFFERENT AREAS OF THE AMIGA COMMUNITY!

What you get!

The very latest version of the REALITY software construction kit which incorporates a whole batch of useful and essential utilities. These include an Animation and Sound Studio, a Graphics toolkit, a Background creation system, Picture and Introduction creators, a FULL blown paint package, Text editing and disk utilities plus much much more! You'll also receive a fully detailed user friendly instruction guide and a handy hints and tips guide! Two further guides that will show you how to make two full blown games from scratch! Two full blown commercial games that have been created using REALITY for you to adapt and learn from! Issue one of the REALITY USER CLUB disk magazine! Two packed disks full of sound effects, music tracks and a MASSIVE amount of graphic images that can be used in your own software! These include characters, animals, weapons, bonuses, scenery, fonts and MUCH MUCH MORE!! You get everything you need for creating your own full blown top quality software with ease!

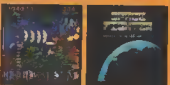
You'll also get FREE membership to the Reality User Club!

This will provide you with a phone helpline, a pen pal list allowing you to contact and work with the already MASSIVE REALITY userbase from around the globe! You will also have access to a HUGE range of software that has been created using the REALITY system and 1000's of graphic images, sound effects and music tracks which you can use with your own software! We are willing to publish any software that you create using REALITY or if you wish you can have other companies publish your software! The REALITY user club can supply you with ALL the graphics, music, sound effects and ideas that you need to create superb software with this system. ALL the hard work has been done for you!

So what do you have to pay for this totally amazing system?

Only £29.99! This product is worth many times this price and only due to forecasted huge sales, low cost advertising and direct sales to the customer we are able to offer it at this unbeatable price! By creating only one piece of software you should get your money back many many times over! How much software do you wish to create? What more can we say other than you would be crazy not to take up this very special offer! Creating software is much more interesting than using it and REALITY is the perfect tool! Please note that this reality package is compatible with ALL AMIGA computers and is hard disk installable!

Screenshots of games created with REALITY



HOW TO ORDER

Please send a cheque, Postal Order, international money order to:
B.P.M. PROMOTIONS, DEPT CUS, 8 MAGNOLIA PARK, DUNMURRY, BELFAST BT17 0JS

PHONE 01232 626694 - PRICE £29.99

UK postage £2. Overseas please add £3.

All payments must be in English Sterling 24 Hour despatch.

EXTRA SPECIAL OFFER - Order NOW and receive a FREE never before released before guide on HOW TO DESIGN A WINNING COMPUTER GAME written by one of the TOP games designers in the business! Essential reading for any budding games masters!

ALL AMIGA

Masterclass

PART 7 There are times when your mouse and pointers aren't enough and only a text command will do. Real men don't use WIMPS ...

If you have been following this series of Masterclass then you are probably ready to leave the comfort of the Graphical User Interface behind and go off to explore the Shell.

So what exactly is the Amiga Shell? Is it a hard crusted covering that surrounds your Amiga keeping its innards intact and safe? No, The Shell is the special window which accepts typed commands. you'll find it in the System directory. Perhaps the easiest way to start a Shell is to press Right-Amiga and N, and then enter 'newsShell' into the pop-up requester.

Top instructor

From the Shell you can enter a wide range of commands which can achieve everything you can do from the Workbench and a lot more besides. The Shell and Workbench complement each other extremely well: certainly more than, say, an MSDOS shell open on a Windows desktop. And as for Apple Macs... well, if you really need to enter text commands on an Apple Mac you should clearly have the wrong sort of computer!

There is a large number of AmigaDOS commands, and as we saw in a previous episode,

most of these are stored in the Workbench's C directory. Hopefully you will have already played around with the Shell (perhaps to use ARexx) and so you'll know some basic AmigaDOS commands, such as 'CD', 'DIR' and 'ED'.

RAMs 'n' List

The key to keeping track of your files is to know and love the AmigaDOS 'List' command.

List is superficially similar to 'DIR', as by default both will produce a list of files in the current directory.

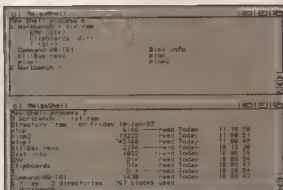
However, List is considerably more powerful and has a million and one different options which can produce a detailed analysis of your current directory.

Both List and Dir will accept an argument in the form of an AmigaDOS device. For example, you can obtain a list of the files in the RAM disk by typing

dir ram: or list ram:

You can see that the results are the same, although the List version includes extra information such as the files' status flags, the creation date and time, and the file size. This is only the start of what List can do.

Here's an example. Let's say



▲ You get more or less the same results when you type in either **dir ram:** or **list ram:**, though **list** provides a little more information for you to go through.

you remember creating a particularly good picture in your favourite art program, but you cannot remember the file name nor can you remember where you stored it on your large hard disk. In fact, all you know was that you wandered the picture in the first week of January, and that the file ends in the usual '.iff' extension. How on earth can you locate it? Well you could go through every file or directory on your Amiga searching through for something resembling your lost picture or you could use List and save yourself hours/weeks of endless frustration and searching.

Please note: this example assumes you have a battery backed clock fitted to your Amiga - if you don't, none of the files will be dated properly. Most A1200 expansion cards have battery backed clocks though so there isn't much cause for

worry as it should work.

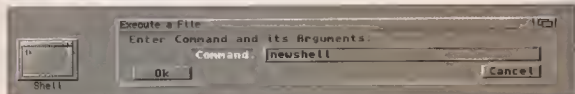
Two of the keywords which List accepts are 'Since' and 'Upto'. The first, 'Since', will list only those files created after the supplied date, whilst the second, 'Upto', will list files which have been created before the supplied date. They can be used separately, or combined to define a special 'window' in time.

The following is the List command which will list only those files present.

list #7.iff since 01-Jan-97 upto 07-Jan-97 all mhsad quick files

It looks a bit complicated, but we'll take it step by step. First of all we use a wildcard, which restricts all the files to those ending in '.iff'.

The 'Since' and 'Upto' commands are a hopefully self-explanatory



▲ The quickest way to open a Shell. Many people also 'Leave On' the Shell icon on their Workbench window.

Templates

If you need a hand using an AmigaDOS command, there's always help to be had. If you want to know what arguments to use with a particular command, you only need use it with the help keyword, which is a question mark, like this:

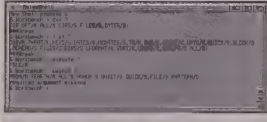
```
list ?
```

This produces a list of all the options which can be used with the command, and each option is followed by a special code letter. As an example, here's what you get in return:

```
DIR/M, P=PAT/K, KEYS/S, DATES/S, NODATES/S, TO/K, SUB/K, &I  
HCE/K, UPTO/K, QUICK/S, BLOCK/S, NOHEAD/S, FILES/S, DIRS/S,  
LFORMAT/K, SORT/S, USERS/S, GROUPS/S, ALL/S:
```

Here's what those code letters actually mean:

```
/A - Argument: Something must follow in order for this command  
to work  
/K - Keyword: The word itself is optional, but if used an argument is  
required  
/S - Switch: This turns an option on or off
```



tory. Remember that AmigaDOS will also accept the words 'Today' and 'Yesterday'.

ALL

The 'all' keyword forces the list to be performed not only in the current directory, but also in all the sub-directories as well.

For example, if you are currently in the Workbench, directory this will force List to look through S, C, L and so on.

NOHEAD

The 'nohead' keyword stops list from displaying the current directory name as it examines it. If you leave it out, you'll see a large number of directories listed one-by-one.

QUICK

By using 'quick' we keep the output to a list of names only, and do without the flags, file size and creation date.

FILES

Including 'files' stops any directories which were entered within the dates from being listed. As we only want to find a particular file, this will speed things up a bit.

There - I bet you never knew there was so much to the List command. It's a very effective tool for helping you track down files. There are plenty of keywords too, here are some more which you might find useful.

DATES

If you have switched off dates by using QUICK, this will cause them to be displayed again. For example:

```
list quick dates
```

This will display only filenames and dates, and ignore flags and sizes.

DIRS

In the same way in which FILES suppresses the listing of anything which isn't a file, so DIRS suppresses the listing of anything which isn't a directory. Example:

```
list nohead dirs
```

LFORMAT

In case you thought that List was in some way limited, the LFORMAT command is what you need. LFORMAT takes a string as it's

LFORMAT

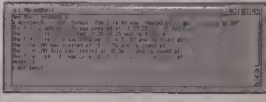
Use List with LFORMAT and you can fine-tune the output exactly. LFORMAT needs a string and the contents of this string determine what the output looks like. Here's a list of the special flags in the string are used for:

```
%A - Attributes (the flags)  
%B - Blocks (a measure of file size)  
%C - Comment (some files have short text strings  
associated with it)  
%D - Date of file creation (or last modified)  
%K - Key (an indication of the file location on disk)  
%L - Length (in bytes)  
%N - Name of the file  
%P - Path of the file  
%T - Time of file creation (or last modified)
```

You can also use your own text in the LFORMAT string in you choose. Here's an example which lists the filename, its path and the time it was created:

```
list lformat "The file %n was created at %t and is  
found at %p"
```

This control is perfect for creating text files which contain the information in the order you need for subsequent processing.



argument, and the contents of the string determines exactly what is displayed and in what order. See the box out for more details.

NODATES

Stops Dates from being displayed. Don't waste your time using it at the same time as DATES. Example:

```
list nodates
```

This will suppress the date and time data from display.

TO

When TO is used, the output from the List command will be sent to following file. Yes, you can do the same thing with the re-direction '>' option. This is

more legible though. Example:

```
list since 01-Jun-96 to  
ram:myfiles
```

This can be useful if you need the files sorted into order. Unlike Dir, List will not sort the files. However, if they are stored in a file you can use the AmigaDOS command 'sort' to produce a new, sorted list.

USERS

Sorry, I've absolutely no idea! Answers to the usual address please!

It's easy to see why List is such an important command to get to know. It will help you keep track of all your files and it's also invaluable when writing scripts either in AREXX or with Killbak) or in AmigaDOS.

Any bright ideas?

If there is anything that you would like to see a merciless tutorial on, please write to and let us know. Likewise if there is any subject that is not covered in the workshop section that you would like to know more about, please drop us a line at CU Amiga Magazine, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU.

Seek and destroy

Looking after the files on your floppy and hard disks can be a chore. There are so many, it's easy to forget what most of them are for. Before you know it, your hard disk is 90% full and it's time for a bit of a spring clean. One of the most useful programs I wrote was "Killbak", which searches through the current directory (and subsequent sub-directories) looking for files ending in ".bak". These are files which application programs often create when saving projects. For example, you may have a text project called "article.doc". When you edit it and save it for the second time, the original will be renamed "article.bak". Once you have finished the project the ".bak" file is useless, and simply consumes space. Nuke it! KillBak is included hereabouts, and also on the CD-ROM. It's written in AReox, which means it's simply an ordinary text file. Until it's used with RX like this:

```
RX res:killbak
```

which executes it. In this case, I've copied the program to the RAM disk to start with. Remember Killbak will work with the files in the current directory. So if you want to delete all the ".bak" files from the Workbench partition of your system, keep the Killbak reox file in RAM, but do a

```
CD workbench;
```

before you run it. Here's the listing (it's on the CD in the mag drawer).

```
/*
  Search for file names
  ending in $?bak, and then
  delete them if necessary.
  (c) John Kennedy
*/

address command /* Use AssignDOS */

/* First, generate list of files & sizes */

Say "Making list of all files in current directory..."

'list lformat "%p%a %l" all files > t:templist'

/* Now, search for those ending in .bak */

Say "Adding up file sizes..."

infile='infile'
outfile='outfile'

total_size=0
number=0

call open(outfile,'t:report','w')
call open(infile,'t:templist','r')

do while -eof(infile)
  dete=readln(infile)
  if data="" then do
    parse var dete numpath " " size
    if size="" then size=0
    test=right(numpath,4)
    if (test=".bak") then do
      total_size=total_size+size
      number=number+1
      call writeln(outfile,numpath)
    end
  end
end
end
call close(infile)
```

```
call close(outfile)
```

```
/* Process the files if required */
```

```
say "Number of back-up files:" number
say "Drive space taken up: " total_size
say
```

```
if number=0 then call ProcessFiles()
```

```
/* All done! */
```

```
'delete "t:report" quiet'
'delete "t:templist" quiet'
```

```
say "Finished."
exit
```

```
ProcessFiles:
```

```
answer=""
do while (answer="D" & answer!="C")
  say "[D]elete files or [C]ancel?"
  parse pull answer
  answer=upper(answer)
end

select
  when answer='D' then call DeleteFiles()
  when answer='C' then return
end

return
```

```
DeleteFiles:
```

```
answer=""
confirm='Y'
do while (answer="A" & answer!="C")
  say "Delete [A]ll or [C]onfirm each one?"
  parse pull answer
  answer=upper(answer)
end

call open(infile,"t:report","r")
do n=1 to number
  file=readln(infile)
  data='delete '||d2c(34)||file||d2c(34)

  if (answer="C") then
    do
      confirm=""
      do while (confirm="Y" & confirm!="F" &
confirm!="Q")
        say "Delete " || file || " [Y]es, [N]o,
[Q]uit?"
        parse pull confirm
        confirm=upper(confirm)
      end

      if (confirm="Y") then interpret(data)
      if (confirm="Q") then leave
    end
  end

  call close(infile)
return
```

FAQ

Frequently Asked Questions

With all this uncertainty hanging in the air, is there any point to it all? Yes. And here's some reasons why.

■Q. What is the Amiga good at?

■A. The Amiga is still an excellent home computer. Easy to use and reliable, it's cheap, easily expanded and works with any colour television. The Amiga is still the best way to get into fields such as desktop video and music: it can do both right 'out of the box' with no extra hardware required. With software packages such as Final Writer, WordWorth, Draw Studio and Art Effect, it can compare very favourably to application software running on other platforms.

The Amiga also has a vibrant shareware and public domain software scene. With resources such as the Aminet, there is no way you'll run out of new and interesting programs to use on the Amiga. The Internet has also allowed Amiga users to get together and chat, which means there is always a large and popular Amiga crowd to chat with.

■Q. How does the Amiga Operating System compare to Windows '95?

■A. In many ways, the Amiga Operating System is considerably better than Windows '95. It's a lot more compact for a start and it's possible to own an Amiga with only 2Mb of RAM and a single floppy disk drive and still get work done. By contrast, an entry level PC now features 16Mb of memory, a 133MHz Pentium and a 1Gb hard drive.

The Amiga OS is also very fast and supports superb multitasking

features. Tying the OS to the Amiga hardware makes it possible to perform such tricks as dragging and flicking screens: something not possible on the PC. The Amiga also comes with ARexx, a powerful scripting language which can be used to link application programs together. There is still nothing quite like this on the PC.

There are flaws of course. Windows includes reliable and invisible Virtual Memory as standard, as well as support for networks and the Internet. It's also easier to upgrade separate components such as the graphics or sound system.

■Q. How does the Amiga hardware compare to that of the PC?

■A. It cannot be denied that the years have not been kind to the Amiga. The raw processing power of the PC and constant development of graphics cards mean that impressive games like Quake are possible. The new generation of 3D graphics cards will make more games possible. All this hardware does have its price of course; and an all singing-all dancing PC for playing state-of-the-art games will cost considerably more than the combined price of an A1200 and a PlayStation or Nintendo 64.

■Q. Do I really need to upgrade to a PC?

■A. No, of course you don't. All your existing Amiga software will still work, regardless of how many copies of Microsoft Word are sold. If you have an Amiga with

an 030 (or even an 020) and 4 or 8Mb of extra memory, you need a very quick PC before a program such as Word will work as quickly.

If you buy a PC, you will need to be prepared to upgrade it regularly: unlike the Amiga, PC's date extremely quickly. By the time you read this, there is every chance that the Pentium processor itself will be out of date and you would be expected to buy a new Pentium MMX chip.

The same goes for memory and hard disk space. Whilst 8Mb on an Amiga is plenty, you need 16, 32Mb or more on a PC for the same results. If you bought a PC with a 75MHz Pentium last year, you'll find it's too slow for most games and large applications now.

■Q. What about a new Apple Macintosh?

■A. Apples look smart, but they are still very expensive. Unlike an Amiga (or even a PC) you cannot buy a cheaper model and upgrade in stages. The operating system is closer to the Amiga's than the PC's (if you can cope with a single mouse button) although you'll miss features such as the Shell and being able to obtain shareware or inexpensive application software. Apple as a company are currently undergoing big changes, with acquisitions such as the Next Step Operating System, so who knows what the next generation of Apple computers will look like, or what software they will run.

■Q. What about the future of the Amiga? Does it have one?

■A. Although the VScore dial seems to have fallen through, there are still plenty of other

interested parties looking at the Amiga. If new Amigas are to appear, there are several options. Either the Amiga could live through the continued use of Motorola 68060's processors, or the OS could be resurrected on some new hardware (such as the proposed Phase5 system). This could incorporate a PowerPC processor (the same as used in the Apple systems which is renowned for being nippy and a good 680x0 emulation) and custom hardware for controlling graphics and sound. Hardware has come a long way since the 1980's when the Amiga's custom chipset was first designed, a system designed from scratch would be able to deal with 3D textures and real-time full motion video as easily as the Amiga deals with the Copper.

The Amiga Operating System will certainly not be forgotten, to many people it's more important than the Amiga hardware. As proved by PC programs such as 'UAE', the OS can be run on other platforms and this will ensure that the Amiga Workbench and Amiga applications will still be used many years from now.

■Q. Should I still spend money on my Amiga?

■A. If you intend to continue to use your Amiga, there is no reason not to. Recent software releases are excellent, and extremely good value for money - especially when compared to applications on rival platforms. When it comes to spending money on hardware you might be more than a little cautious; but remember, if you buy a SIMM, a printer, an IDE hard drive, a CD-ROM, ZIP or JAZZ drive that these can all be used with a PC too. ■
John Kennedy

Logos, meanings and mysteries:



CD32 queries, ParNet and various other CD-ROM-related problems.



All about upgrading RAM, operating systems and processors.



Plug-in hardware of any kind: scanners, disk drives etc.



Answers to queries on particular pieces of software.



Music, sampling, MIDI and anything that makes a loud noise.



Miscellaneous topics to keep your Amiga running smoothly.



Form-feeds, page breaks, preferences and lots, lots more!



Monitors, TVs, modulators, screen-modes and all that stuff



Pixels, sprites, animation, pictures. In one small word: graphics.



Spreadsheets, databases, organisers, accounts ...



Everything you need answering to the Internet



Not everything fits into a pigeonhole, but anything you like fits in here.



And it's a very warm welcome to CU Amiga Magazine's version of Master mind. Please give a big hand to your contestants Mr Andrew Korn and Mr Mat Bettinson. Tonight's subject is the Amiga, from 1985 to the present.



Andrew lives in north London and is versed on everything Amiga. His chosen topics are hardware and utilities.



An ex-technical engineer, Mat specialises in the Internet: what it is, what it does and what it has to do with the Amiga.

Tower critical!



I have an A1200 with an internal 3.5" Quantum Lightning 365 Mb IDE hard drive. In the near

future I would like to buy a CD-ROM such as the Bx Samsung IDE. I have just bought a tower with 200 watt PSU and internal cables. I want to put the CD-ROM into the tower. Bearing in mind the possible power supply problems if I fit a 50MHz accelerator in the future ...

1. Which is the best option? To remove the hard drive and use it with the Alfa Quatro. In the tower with the CD-ROM or leave the hard drive in the A1200 along with the Alfa Quatro and take an IDE lead to the tower for the CD-ROM?
2. If the hard drive is put in the tower does it matter if it is put on its side rather than flat?
3. Is 300mm a 'safe' maximum length for an IDE cable?

A. Robinson, Hayle, Cornwall.

First of all, thanks to Gordon Moss, Ryan Morgan, Greg Fox, Mr P.A. Burgess, Norman Haigh, Derek Gascoine and many others who have also written in on the subject of tower cases. It looks like we will be going ahead with a feature on DIY tower conversions.

Correspondents seem to be expressing most interest so far in using a mini tower to hold CD-ROM drives and hard drives, like A. Robinson, but we would like to take it a step further and look into fitting the A1200 motherboard into the case, maybe even Zorro slot expansion. Keep your comments coming in. In the meantime, we are going to

answer A. Robinson's letter as it seems fairly representative of the letters that we've been receiving.

1. Don't move the hard drive if you don't have to, although 3.5" drives can be quite a load on your power supply. Moving your drive means the power can be supplied from the tower PSU, leaving your computer's PSU unburdened.

2. Modern hard drives can take all sorts of rough treatment. However it is best to avoid putting it on its side especially if you have a CD-ROM in the tower too as your discs will keep falling out.

3. Oh dear, a contentious issue. Various people have written in concerned about IDE cable lengths and the safety of unbuffered interfaces. We use an A1200 in a tower with about 600mm of IDE cable connecting a hard drive and a CD-ROM without any problems whatsoever.

To address the more technical issues, yes, the A1200 has an unbuffered interface, and if you want to be totally secure go for a buffered splitter, it's safe and will allow you to connect additional devices too. Stories of exploding CPUs are undoubtedly exaggerated - I haven't heard of a single case and it seems unlikely. I'd expect problems with unbuffered interfaces and long cable lengths to lie in capacitive loading leading to unreliability rather than CPU death. In practice keeping cable lengths to about a metre or half a metre is OK.

If only ...



What is the difference between an E40 internal disk drive for the A1200 and a E16 drive for a PC? I have just fitted a new disk drive and it looks very much like a PC

one. It even had the HD detector switch! What is stopping the Amiga from formatting at a higher density?

W.G.Hall, Bischofsgarth, Stockten.

The Amiga expects the disk drive to tell it things when it boots up and when a disk is changed; PC drives don't do this. An interface can be built with a few flip-flops and gates, but it's a lot of work for what will save you very little in the end. HD floppies are harder work - in addition to the above you will need to have the motor speed which means replacing the oscillator crystal and ... look, just buy an Amiga HD drive instead. Sorry.

A500 + CD32 = ?



For the past four years I have been the proud owner of an Amiga 500 with the A501

memory expansion unit. It has been adequate for my purposes thus far, but I now wish to upgrade to a new system, mainly to have access to the large treasury of software available on CD-ROM in addition to the advanced AGA graphics and the latest Workbench. The Eyeteck SX32 Combo Pack seems to be a very attractive upgrade option. I would be obliged if you would enlighten me on the following:

1. What is the difference between the SX32 and the SX32 Pro?
2. What are the advantages of this Combo Pack as compared to an A1200 with similar specifications and a CD-ROM drive?
3. What would be the best way

to connect my A500 to a CD32?

4. Is it possible to use the keyboard and disk drive of my A500 with a CD32 in order to convert it into a fully-fledged, up and running A1200?

5. Is the A570 CD-ROM drive still available and did it require any modifications?

Semir Bhardwaj, Sultanets of Oman.

A lot of readers are tempted by the notion of upgrading a CD32 to turn it into a CD-ROM equipped AGA super machine. It isn't all that straightforward and it doesn't work out all that cheap.

1. The primary difference is that the SX32Pro has a faster processor in it, while the SX32 has no facility for changing processor.

2. The difference are small. The A1200 won't cope with some CD32 games, but is more exposable.

3. The CD32 S-port, from Mupret developments (01423 712600) is probably your best bet. It's just fast enough to get away with using the CD32 as a CD-ROM drive but don't expect it to give your A500 access to the CD32's 68020 processor.

4. No, if you want to turn a CD32 into a full AGA computer, you'll have to go the SX32 route or buy an A1200 and CD-ROM. A500 + CD32 does not an A1200 make.

5. The A570 plugged straight into the A500 with no modifications but it did require OS2.0 or greater. I haven't seen one on sale for ages, but Golden Image (0181 900 9291) will sell you an A500 CD-ROM if you want one.

Windows Amiga

1. How much would it cost and how could I run Windows on my A600? I've tried to balance the pros

and cons of buying a PC or just an emulator.

2. I'd also like to ask what are those Zippo drives you plug into the side of an Amiga?

3. Would I benefit from buying a hard drive or a CD-ROM? If so how many Mb of RAM should I get or what speed should the CD-ROM be?

4. Could I use the Internet and is there anything for the A800 to speed it up, something like the Viper, for example?

Brett Edwards, London.

1. The best way of running PC software is on a PC. If you want a PC/Amiga combo, talk to HiQ about

their *Siamese* system. Software emulation in the form of PCTask 4.0 (£69.99, from Wizard, tel: 01322-527800) and the forthcoming PCx works wonders these days but they are too slow for serious use.

2. Hmm, if you plug a Zippo into your Amiga you will get fire to your PCMCIA port; Zippos are refillable lighters. I guess you mean either Zappo, an old PCMCIA hard drive/CD-ROM controller, or ZIP, the mass storage device from IOMEGA, which most users plug, via a SCSI interface such as the squirrel into the PCMCIA slot. ZIP drives are fast, barely slower than a hard drive, store 100Mb on a £15 disk and are as robust as a floppy. Top drives.

3. Yes! Hard drives may sound to those who haven't used them like a minor convenience, but buy one and you will never regret it. They cost very little now and we cannot over-emphasise how much easier and better it makes using a computer.

CD-ROM drives are great, mainly because they allow you to use our amazing CUD-ROMs every month, which is kind of like getting 700 odd floppies mounted on the cover only quicker and a lot less heavy, but if you don't have a hard drive, save up and buy one as soon as possible. You will thank us.

4. Yes, and Yes. It is called the Apollo 620, and we gave it 91% when we reviewed it a year ago. Shop around for best price or call Visage on 0115 9444500.

Hole in my GIF

I have recently joined the 'Information Superhighway' and am making my own pages. I need to make transparent GIFs (GIF89a or something?), however I can't find a way to do this on my Amiga 1200 (WB3.0, 2+4Mb RAM, 2 1Gb HD).

I've read about loaders/savers that allow you to do this for various software e.g. PPaint, but I can't find such software anywhere. I own PPaint 6.4 and Photogenics 1.2 if that's of any help

Adam Smolerzyk, edem_a@australiamail.com

PPaint is a great tool for producing artwork for Web pages but the GIF loader is not included in PPaint 6.4. GIFs are a proprietary datatype and commercial use has to be paid for - hence Clonaid supply the GIF loader as PLoat rather than with the release.

However, GIF's 'owners', Unisys, are coming down on this too, so your best bet is either to upgrade to the brilliant PPaint 7 which has GIF support, or use a graphics conversion utility such as Ultracutter, which will convert IFFs and Anim8 to GIFs and AnimGIFs with transparency.

17" too big?

I currently own an Amiga 1200 with 6Mb RAM, 210 Mb hard disk and 50MHz '030 accelerator. I am now

seriously considering upgrading my Amiga again and would appreciate your help

1. In the August 96 issue of CU, there was a review of the Microvitec M1764 17" monitor. Is there a 14" or 15" version of this monitor?

2. I am going to buy a CD-ROM drive and later a tower case with Zorro slots for my machine but am unsure which CD-ROM drive to buy. Which ones would quite happily work with my standard A1200 and could at a later date be placed into a tower case?

3. By how much will an FPU speed up packages such as Imagine 4?

4. Are there any plans to run C++ tutorials in future issues of CU Amiga Magazine?

Christopher Caleb, The Republic of Email.

1. Microvitec do produce a 14" monitor, the 1438, although it is not a smaller version of the 1764. However, it is a good multi-synch monitor for use with video modes and graphics cards. It lacks the excellent digital screen mode controls of the 1764 but is still highly recommended.

2. Any 100% ATAPI standard IDE drive will work.

3. A lot. An FPU can actually make significantly more difference to mark-intensive software such as Imagine than a CPU upgrade.

4. A few readers have expressed an interest in this idea recently, we'll look into it.

My own game

I recently designed a space strategy game and was hoping you could give me some advice

1. I was thinking of sending the design to a software company for evaluation, how detailed would the design need to be?

2. How would you recommend I copyright my game?

3. Which software company should I send the design to?

4. If the design is accepted and published what sort of royalty would I get?

5. What are the chances of a design from someone outside the company being accepted in the current Amiga market?

M. Smith, Bramley, Leeds.

1. Oddly, not too detailed! If you send 100 pages of designs, no-one will have time to look at it. Your first letter should contain just enough detail to give a good idea of what the game is about and to intrigue the software company enough that they want to contact you to find out more, and so longer.

2. As soon as you write something, you have copyright. To protect your copyright, put a copy by registered mail to yourself before you post it to anyone else and make sure you keep the envelope sealed.

3. Look for companies still active on the Amiga, whose products are close but not too similar to your idea.

4. This depends on the individual company, how many people are required to work on the project, and how complex the coding, graphics and sound are, and so on. If you are worried about being ripped off, look for a software agent to negotiate your contract.

5. There aren't a lot of Amiga games being produced these days, so the demand for designers isn't high. You may have more luck if you go to a software house which converts to other systems as well. However, there will always be interest in a design good enough to be the next Worms. ■

Send your Q&A problems to ...

You can send your technical problems (or answers - Ed) to CU Amiga by the following means.

By letter to: Q&A, CU Amiga, Priory Court, 30-32 Pennington Lane, London, EC3N 3AU.

Email: Q+@Amiga.co.uk

NO SAES PLEASE We regret that we can't respond to readers' questions by post or over the phone. Please do not include a stamped addressed envelope with your letters as we simply don't have time to answer the thousands we receive. Responses are only available through the pages of this magazine.

Special offer

C64 & 45 games pack
Spectrum V2 & 50 games
Vic20 & 30 games
All 3 packs for only £9.99
 SEE LEFT FOR DESCRIPTION

1000
SPECTRUM GAMES pack
NOW ONLY £29.99

W
ARE 2000
g of the
on 1 CD
ON CD release no
ch 97
March 97
99
99

DE
with frame
grabbers
4.995

UPGRADE to CIB
+ free software
IMAGE SCANNING,
GRAPHIC CONVERT
FILE TRANSFER
AMIGA ↔ PC
Phone
for quote

NEW TITLES

3638 ULTIMATE FOUR TITANS *By* *Atari* *Excellent* *Turner* *Games*
3639 YANK ANQUE, *Just* *Will* *1-3* *Superb* *arcade* *adventure*
3640 RAISE THE TITANS *Great* *3D* *Adventure* *game*
3641 *See* *3638* *3639* *3640* *3641* *3642* *3643* *3644* *3645* *3646* *3647* *3648* *3649* *3650* *3651* *3652* *3653* *3654* *3655* *3656* *3657* *3658* *3659* *3660* *3661* *3662* *3663* *3664* *3665* *3666* *3667* *3668* *3669* *3670* *3671* *3672* *3673* *3674* *3675* *3676* *3677* *3678* *3679* *3680* *3681* *3682* *3683* *3684* *3685* *3686* *3687* *3688* *3689* *3690* *3691* *3692* *3693* *3694* *3695* *3696* *3697* *3698* *3699* *3700* *3701* *3702* *3703* *3704* *3705* *3706* *3707* *3708* *3709* *3710* *3711* *3712* *3713* *3714* *3715* *3716* *3717* *3718* *3719* *3720* *3721* *3722* *3723* *3724* *3725* *3726* *3727* *3728* *3729* *3730* *3731* *3732* *3733* *3734* *3735* *3736* *3737* *3738* *3739* *3740* *3741* *3742* *3743* *3744* *3745* *3746* *3747* *3748* *3749* *3750* *3751* *3752* *3753* *3754* *3755* *3756* *3757* *3758* *3759* *3760* *3761* *3762* *3763* *3764* *3765* *3766* *3767* *3768* *3769* *3770* *3771* *3772* *3773* *3774* *3775* *3776* *3777* *3778* *3779* *3780* *3781* *3782* *3783* *3784* *3785* *3786* *3787* *3788* *3789* *3790* *3791* *3792* *3793* *3794* *3795* *3796* *3797* *3798* *3799* *3800* *3801* *3802* *3803* *3804* *3805* *3806* *3807* *3808* *3809* *3810* *3811* *3812* *3813* *3814* *3815* *3816* *3817* *3818* *3819* *3820* *3821* *3822* *3823* *3824* *3825* *3826* *3827* *3828* *3829* *3830* *3831* *3832* *3833* *3834* *3835* *3836* *3837* *3838* *3839* *3840* *3841* *3842* *3843* *3844* *3845* *3846* *3847* *3848* *3849* *3850* *3851* *3852* *3853* *3854* *3855* *3856* *3857* *3858* *3859* *3860* *3861* *3862* *3863* *3864* *3865* *3866* *3867* *3868* *3869* *3870* *3871* *3872* *3873* *3874* *3875* *3876* *3877* *3878* *3879* *3880* *3881* *3882* *3883* *3884* *3885* *3886* *3887* *3888* *3889* *3890* *3891* *3892* *3893* *3894* *3895* *3896* *3897* *3898* *3899* *3900* *3901* *3902* *3903* *3904* *3905* *3906* *3907* *3908* *3909* *3910* *3911* *3912* *3913* *3914* *3915* *3916* *3917* *3918* *3919* *3920* *3921* *3922* *3923* *3924* *3925* *3926* *3927* *3928* *3929* *3930* *3931* *3932* *3933* *3934* *3935* *3936* *3937* *3938* *3939* *3940* *3941* *3942* *3943* *3944* *3945* *3946* *3947* *3948* *3949* *3950* *3951* *3952* *3953* *3954* *3955* *3956* *3957* *3958* *3959* *3960* *3961* *3962* *3963* *3964* *3965* *3966* *3967* *3968* *3969* *3970* *3971* *3972* *3973* *3974* *3975* *3976* *3977* *3978* *3979* *3980* *3981* *3982* *3983* *3984* *3985* *3986* *3987* *3988* *3989* *3990* *3991* *3992* *3993* *3994* *3995* *3996* *3997* *3998* *3999* *4000* *4001* *4002* *4003* *4004* *4005* *4006* *4007* *4008* *4009* *4010* *4011* *4012* *4013* *4014* *4015* *4016* *4017* *4018* *4019* *4020* *4021* *4022* *4023* *4024* *4025* *4026* *4027* *4028* *4029* *4030* *4*

5842 MACDONALD-LAND Softball game listed in ZXOL #64 A1 2048
5843 JOST W Softball CBA games with upside Ariga graphic
5844 DEL-LORE GALAGA V2.6 Thai Very Latest Galaga, 14 Pseummers

2950 LAZER PACE Good iron type, minor-say action best. In play
2954 TRAIN DRIVER (SALVATION) The most realistic train set
2957 MASTER BLASTER Kid version, expanding with 1000g
2958 KNOCK-OUT Mini destruction derby, very attractive

9958 OLIVACEOBN 14-193 200 Complex silhouette limited to DUCM
9960 MONTAL KLMAOUM 3 Wheel but fun (dist-err-up)
9961 CODE NAME NANO Super Thrust clone (NANO FLY 2)
9962 MICRO MAMMOT V2 Get on by buying wheels. Great gear

2953 POWER-BANKS If you like power then this is for you
2956 LETHAL FORMULA Adventure based & Money based
2958 BEGINNER TYPING TUTOR
2954 WORLD PUZZLE 1992 Games Combined available in either bundle

2558 KID DISK 7 Another very fine education program
2558 CAPLY LEARNER (age 3-5) teach your sons sons to read
2557 A-Z COUNTRY OF THE WORLD

256 BASIC ELECTRONIC, V1.3 (P) used for Electronic Art
256 MASSIVE GUIDE TO THE INTERNET V2.2

11010 WORD INSTALLER *online* AGO04880 wordsearch to HD
11011 TURBO-CA1 PRO V1.2 (not WD 1.2) *write* catalogue
11012 TEXT-ENGINE V5 (not WD 1.2) *The very online word processor*

1.0112 SPARKY 2000 - see just below rear door
 1.0111 TOTAL EOLIPS - Disk Magazine 1
 1.0115 NEW CHEAT (8888, V2.1) 2 disk version games patcher File

23016 ULTRA ACCOUNT Another very good account straight
23017 PINK LOTTERY SC The very latest & best lottery program
23018 PINK GREY HOUND Like ProGamble but for dog
23019 AUTO STOPPED GRAMM Vd. Latest. Music was terrible

J1622 PRO-FOOTBALL 11 G2 Football producer the ProFuturide
J1623 REMOTE: Remind important state
J1624 REMOTE: Remind important state

11695 MS-DOS 5.0-3 The latest PC-DOS/MS-DOS disk converter
11709 HD GAME INSTALLER 4 Install loads more games to HD
11827 SIFT-AND-MOOPY Complete computer manual. The version
11830 SIFT-AND-MOOPY Complete computer manual. The version

J1028 MAGIC-USER-INTERFACE V3.1 update for versions 2.2
 J1029 OPTIC 48K, EMULATOR BACK 1.24 At last it work
 J1030 MEX 1 Emulator v6.1 (MEX 8) 485K computer set

11031 BOB AMBA, JAMES MIT & CHAT M. O. Omba
11032 VERLUS DI-KOPO-RI VS.2 just WIS 1.20 Leland

1x2C M&E EXTRA PAGE (H) 12 x	\$75.00
1x2C M&E EXTRA PAGE (TS 2) 2-	\$75.00

[illegible]

IS BASIC ELECTRONICS, Vols 1 & 2 for Electronic Inst
A MASSIVE GUIDE TO THE INTERNET V2 2

[illegible]

805 REMOTE: ingeni[ng] imports data
806 SHAPE-SHUTTLE: V2.3 The very latest Mac utility
807 MESSY 5.0.3 The latest PC-to-AMIGA data converter

027 SOFTWAREMONEY Complete game collection currently. The version
028 that requires HD or MMIO. Give this 1 by Powerman
029 MAGIC-USER-INTERFACE V3.1 update for versions 2.3
030 CPU: 486, EMULATOR INBOX 1.34 At least it work
031 MISC 1 Emulator v2.1 (MID 8) MISC computer on
032 800 AMIGA GAMES HIT & CRASH V1.0 demo

APPLIC. INTR. & EXTRA DISK. APPLIC. E. & ALUM.

AC 500 EXTRA PAGE 001 128	75.00
AC 500 EXTRA PAGE 113 256	75.00
AC 500 EXTRA PAGE 226 384	75.00

WE ALSO STOCK THE ENTIRE COLLECTION OF LSD TOOLS 1-150 SCOPE 1-220 FRED FISH 1-1000 ASSASSIN GAMES 1-20



Backchat

Don't be shy, find your voice amongst the thousands of Amiga owners out there. Write in to Backchat and get yourself and your views noticed.

Brainwashed

Having read January's issue of CU Amiga Magazine, I just had to write in to agree with James Pullens' comments (letter of the month). The Amiga must shout out. It is losing ground rapidly because there is no one out there shouting about how good it is. The Amiga is a powerful machine especially for us home users. As has been stated and no doubt time and time again will be said it can do what any PC can do. If people can be lead away so easily then the Amiga must be in there doing battle with the PC. So let's see some brainwashing for the Amiga.

**Keith McMaster,
Eaet Yorkshire.**

We try and do our best, really we do.

Not brainwashing mind. Keith but in keeping people informed about just how great the Amiga is. Maybe we may see some form of advertising for the Amiga in the near future. So, fingers crossed.

Shopped again

Though I think your section shoppers corner where you name stores which stock Amiga programs is a good idea, especially in these times when its so hard to get Amiga software in the high street, I do think you should check up more on the information given to you. For example, in January's edition you mention a few shops in Wood Green which claimed to have Amiga software but they don't. Multimedia Discount Shop these days have a small Amiga game section (about 13 games) most of which are either old or

compilations as opposed to about 200 PC games/programs. I wouldn't travel any distance to get games from here. I think they have a kind of bargain bin and have absolutely no Amiga software there anymore. WHSmith again, they used to have, but this was a long time ago, there is NO Amiga software there at all. The place you most likely to acquire Amiga games is called Shekhana Computers and Communications. Its next to the video shop opposite the bingo hall at Wood Green. They have about 40 titles there. The newest being Worms, though most

of them were pretty old Hit Squad re-releases

Diamond Anglin, London.

Thank you for your comments Desmond. The list you mention was compiled by us and based on research we carried out ourselves quite a long time ago. These were included to kick off our new listings section so we accept that the level of service may have changed. However, we have introduced a more detailed service whereby readers send in their comments so you get a more up to date picture (see column far right). This service will be updated every six months to keep it currently relevant. Hope that answers your query and you got a free plug for Shekhana Computers.

Suspect survey

I picked up your January issue from my local Amiga dealer and noticed a survey form in there. I thought I might answer this survey, but could not find the form on the CD. Surely you don't expect us to type it all in do you? Of course readers in the UK will probably just write their answers on the form and post it in, but that would be much more expensive for us over here on the other side of the world. Whereas Email is only a cent or two.

If the survey form is on the CD, could you tell us the path to the file? Getting onto specific questions I found one to be particularly strange - the one about if I bought a IBM PC, how soon would I stop reading CU Amiga. Maybe you don't realise it, but not every Amiga owner that buys a PC does so to replace their Amiga. In fact I bought a PC

clone two years ago, for work purposes. This does not mean I use my Amiga any less, or stop buying Amiga magazines.

The Amiga is a hobby, and I enjoy using it (well then actually, I have a 1200 and a B2000). The same cannot be said for the PC. I have been using an Amiga for the last 10 and a half years and will probably continue to do so for the next 10 years, and will continue buying your magazine (as long as I can get the CD version).

Of course like any of these surveys, a lot of the questions are for your advertisers benefit, rather than anything to do with the magazine or Amigas or even computing as a whole. I can't see what relevance the consumption of alcohol is (I am a Baha', I don't drink alcohol) but I hope you don't intend to have alcohol advertising in your magazine.

Ross Dailey, USA.

You're right, there was an awful lot in that survey to fill in. Directives from 'above' came to us at a very late date that a survey was going to be included with that issue, and because of the timing of this decision it was not quite to our liking (handled by a different department from the normal editorial team).

We did actually have a version of that survey on our Web site for a time and got lots of useful feedback from that. We'll continue to put other much smaller occasional questionnaires on the Web site, so drop in every now and then to see what's up (www.cu-amiga.co.uk).

Most of those 'lifestyle' questions are indeed posed to see if it's worthwhile for companies outside of the Amiga scene to take advertising space in CU Amiga.

We'll be publishing the results of that survey and the survey carried out on the Web site in a forthcoming issue (at the time of writing the results are being compiled, so we should be able to bring them to you next issue). It will be interesting to see how many people said they

THE FAR SIDE

By GARY LARSON



"You must be new here! ... That's Miss Crutchfield, and she's there to make sure nobody runs with scissors."

The beast is here



Letter of the month

So it's finally arrived - the new computer that will save the Amiga users from the current situation! We should all thank the mighty Phase 5 for bringing us what we have been looking for years. Does this mean that the Amiga is saved? I think not. In fact it would be wrong to say that the AiBox is just the new Amiga. The AiBox has almost nothing to do with it! Wasn't that what we had been waiting for? Something totally new. We know that the Amiga has come to its maximum potential with the 060 accelerators and I think that adding new processors to the old technology (eg PPC) is not a good solution. They could end up like PCs - just plain old boosted technology.

The AiBox is really the next BIG step for us. If Phase 5 does not screw up! We all know what happens when a new computer is sold: all sorts of questions come to mind: should I buy it? Will it be supported for a long time? Will there be any software?

I imagine Phase 5 to allow maximum Amiga emulation on his new machine. This is really important because being unable to use old Amiga software could stop people from buying. Also it is crucial to ensure that some 'basic' software is available when the AiBox comes out. Not really games (although it surely could help), but development software like an adapted C language, a music creation tool (SoundStudio2?), a graphic package (DPaint V1?), a raytracer, maybe a multimedia show maker (Scale 5?), etc.

because I swear won't buy a machine on which I can't create, and that's the reason I bought an Amiga and not a PC! So the Amiga as we know it will probably survive as it is new thanks to Amiga enthusiasts and to Public Domain (thanks Aminet!). The AiBox really represents the new breakthrough in terms of technology but also as a commercially viable product. I have my fingers crossed.

Diogo Pappalardo, E-mail.

We'll it hasn't quite arrived yet but we were so excited about it that we had to tell the world. As you say, it's not actually an Amiga, but it's what we have been waiting for. The Amiga scene is loyal, but those involved in it know what they want: a cutting edge affordable creative computer platform. As an Amiga magazine it might seem strange that we are pushing a non-Amiga platform when others are singing the praises of other proposed official Amigas, but we have a duty to give our readership honest, informed opinion. Let's hope this pioneering work from Phase 5 shakes up the ideas over at QuikPak, who currently seem to have a less realistic line up of new Amigas.

would like to see more dogs and cats in the magazine, as asked by one question!

Lynx footy

In the November issue, the site of the month in your comics section was the Carling Premiership site. This site is wonderful if you have a graphical browser! But if there a

are people out there who use ALynx extensively, a Lynx friendly site for UK soccer results is <http://soccernet.com>.

John Tomic, Malborough, Australia. Email: etom@net-apoca.net.au

CU and UK footy fans thank you.

Come and get it

The following is a listing of recommended stockists who supply Amiga products. If you don't see your favourite shop in here, please fill out the form below and send it in to us.

BARBIFORD GAME, 4 Derley Bradford, West Yorkshire. Tel: 01274 305055. (Games utilities, CD32s.) ★ ★ ★ ★

EASTBORNE Electronics Boutique, Eastborne Amersham Centre (Games, accessories) ★ ★ ★ ★

EXETER Electronics Boutique, High Street, Exeter, Devon. (games, utilities, educational software and accessories) ★ ★ ★ ★

FIVERESS Electronics Boutique, Eastgate Centre, Inverness. Tel: 01463 716 464 (Games, accessories) ★ ★ ★ ★

LINCOLN Micrograph, Sincel St. Lincoln (games and repairs) ★ ★ ★ ★

MANCHESTER Classic Values, 11 Donnegate, Greater Manchester. Tel: 0161 723 1638. (Software, CDs, CD32, floppies, PD, hardware accessories.) ★ ★ ★ ★

NEWCASTLE GAME, Eldon Square, Newcastle, Northumberland. Tel: 0191 274 7321. (Games, programs, CDs, magazines and books.) ★ ★ ★ ★

NORTHAMPTON Direct Software, 165 Birchfield Road, East Northampton. Tel: 01604 722 499. (tons and tons of software) ★ ★ ★ ★

PLYMOUTH GAME, Plymouth. (games, joypads, joysticks) ★ ★ ★ ★

ROTHESHAM Micro Fax, The Guardian Centre, Rotham South Yorkshire. Tel: 01709 36000. (Games including CD32 stuff, CD-ROMs, A1200s hard drives including a free fitting service) ★ ★ ★ ★

SOUTHAMPTON Digital Games, 95 Victoria Road, Woolston, Southampton, Hants (Secondhand Amiga programs, hardware, PD library, blank discs) ★ ★ ★ ★
Game 12 Bargate, Southampton, Hants Tel: 01703 237771. ★ ★ ★ ★

★ quality of goods available ★ very little ★ average ★ mountains

■ quality of service ■ poor ■ good ■ excellent

For the month's entries thanks to: Wayne Pryor, Lincoln; Gareth Murlin, Newcastle; Dave Enfield, Southampton; Charles Panny, Hants; Andrew Fitzgerald, Rotherham; Jason Hill, Cornwall; Stephen Wootton, West Yorkshire; MA Kay, Bolton; Colin Kennedy, Isle of Lewis; Martin Den, East Sussex; Graham Hemmison, Devon; Ken Smith, Lancashire.

Previous entries include:

Crows High Street Micros
Beecham The Computer Store
Leicestershire Micrographists
Leeds HMV (Oxford Street), Multimedia Discount Shop (Woodgreen)
Liverpool Game
Luton Beatties, Electronic Boutique, Tandy, Sidco (Dorchester)
Manchester: Boots (Ardale Shopping Centre), WHSmith (Ardale Shopping Centre), HMV, Game
Middlesbrough Game, Virtual Reality
Middlesbrough Chips Computers
Preston Microtron
Sheffield Game
Sunderland Screen Arts (Eastbank Street)
Targus Multimedia

Name of Shop

Shop's address

Type of products on sale

Quantity of goods available

Very little

My name

Address

Quality of service:

Very little

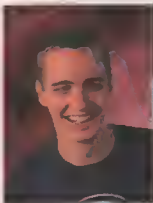
My name

Address

Thank you for taking the time out to fill in this form. Help keep the Amiga alive

Points of view

Gonna have a revolution



by Tony Morgan
CD Amiga
Magazine's Editor

by Tony Morgan

This month you're one big step closer to being able to master your

own audio CDs from your Amiga, thanks to this month's excellent SoundStudio cover mount.

Who knows? Maybe we're on the brink of fawning a whole cottage industry of people producing music from their bedrooms on their Amiga, cutting their own CDs and then perhaps selling them direct to the market themselves, cutting out the middleman all together.

Perhaps it's long way off until this is a reality but until very recently mastering your own music CDs was out of the question. CD audio writing 'machines' would cost thousands of pounds and were only available from a select few professional audio shops. Now you can get a CD-ROM drive that also writes CDs for around £300! With a single blank CD setting you back about a fiver, DIY CD production is now a solid affordable reality.

This is one of those little technological revolutions that seems to creep up and then suddenly jump but at an unsuspecting public.

For computer-based musicians this is as big a step forward as the

emergence of MIDI and even sampling. A musician on a budget can now press up commercial quality CDs with nothing more than a computer. No mixer, no keyboards, no effects units, in fact none of that traditional outboard gear is actually required any more.

Compared to mastering to DAT, cutting a CD is infinitely more useful. Apart from studios and record company HQs, who do you know that actually has a DAT player? Now compare that to how many people you know in possession of a CD player. What format would you rather use?

If you still think there's a catch, you're still convinced this can't quite be true, think again. You don't even need a 16-bit sound card or a fast Amiga. With a CD-writer (doubling as a conventional CD-ROM of course) and SoundStudio, all you need is any Workbench 2 or more recent Amiga, a couple of megs of RAM, a hard drive and some CD writing software - that's it! Now if that's not a technological revolution then I don't know what is. ■

“With a single blank CD setting you back about a fiver, DIY CD production is now a solid affordable reality.”

Further education



by Lisa Collins
CD Amiga Magazine's
Deputy Editor

by Lisa Collins

The Amiga is supposed to be the ultimate home computer - cheap and well catered for in terms of software

for games, word processing, DTP, graphics and music. Hang on, isn't there another area that home computers are used for? Yes, education. But where's all the software?

Generalisations can be annoying but more often than not, there is a grain of truth in them. Generally speaking, most home computers are bought by parents to do a bit of home accounting, word processing and so on while the kids can use it to play games and help with their homework. And in today's climate children need all the help they can get in trying to educate themselves.

We are supposed to be in the technological era, our children are meant to be reciting binary in their sleep and surfing the Net for their recreation time.

So where is all the Amiga's educational software? There just isn't any, at least nothing much appeared in the last couple of years. Correct me if I'm wrong but I only know of Guildhall's 'Ten Out of Ten' educational range and some encyclopedias from Epic. Hardly, enough material to

formulate young Einsteins let alone give a helping hand with the basics of the three Rs or anything as taxing as learning a new language.

Perhaps the advent of the Internet taking off has replaced the need for children to have educational software as they can find out most information they want here, once they've sifted through all the other irrelevant material that the Net seems to be crammed full of.

However, not every child has access to a modem. PC software manufacturers recognise this and have the market well sussed. There are copious amounts of learning and educational material available for the PC. There is even a new magazine coming out dedicated just to children's educational software on the PC, so the demand is there.

I don't know the real reasons why there isn't any educational software available for the Amiga (opinions are welcomed on can be sent in to me at the usual address) but I do know that it is an opportunity is being missed out on. Please rectify. ■

“Isn't there another area that home computers are used for? Yes education. But where's all the software?”

Whole lot of shaking going on



by **Matt Bettineau**

We find ourselves in much the same situation as before; yet another company looking to take over ownership of the Amiga and manufacture them once again.

However, this time the situation is a lot different and we are in the more fortunate situation of instead of having more than one major contender. This puts us in a better position than solely relying on one saviour for the Amiga. As we have unfortunately discovered to our disappointment in the past relying on one saving light is not a good idea.

Most of these contenders are

actually either producing machines or planning to produce something resembling an Amiga so again this is welcome news.

However, they all appear to be coming from different angles when it comes to their vision of the way forward for the Amiga.

So what exactly is the current situation as it stands and how is it different from what we have seen before?

Firstly QuikPak are actually a manufacturing company. Already they are making promises about releasing new up-spec Amigas, you know, the kind we said Commodore should have released several years ago.

Coupled with promises of new machines, QuikPak have gone on record as saying they're looking to the incredibly powerful Dec Alpha RISC chip instead of the Motorola PowerPC.

However, the drawback with this is that it's too expensive for the low-end market, so low-and machines will continue to be 680x0 based. This philosophy goes against previous wisdom and makes the gap between the Phase 5 PowerUp and AIBOX yet wider.

It's Phase 5 which is the second major difference this time around. Even though they may not be in the running for ownership of the Amiga

“The market isn't big enough for all of you, for Pete's sake get together and try to organise some common ground ...”

itself, no-one can deny that they've done more to take the Amiga forward than any other company. Indeed they would appear to be the only hope for a true next generation Amiga before the next Millennium.

So we find the next probable company to own the Amiga will produce Amigas as we know them (and is already doing so) albeit more expensively and with some half reasonable specifications at last.

Meanwhile Phase 5 are set to release the PowerUp to the Amiga market - something that will be successful and which surely QuikPak can't ignore with reference to their Dec Alpha statements.

ProDAD are also working on a platform-independent AmigaOS style operating system which is a fundamentally great idea although Phase 5 are doing the same and QuikPak will presumably port AmigaOS to the Dec Alpha.

Lord have mercy, this is insane! The market isn't big enough for all of you, for Pete's sake get together and try to organise some common ground for ALL our sakes!

■ **Matt Bettineau is**
■ **CB Group Magazine's**
■ **Technical Editor.**

Abort, retry, fail?



by **Andrew Kern**

With computing now so much a part of our culture, it had to happen. There has been the odd cheesy Space Invaders inspired trash-pop track in the lower reaches of the charts before, but White Room's *Abort, Retry, Fail* which has just reached number 1, is as far as I remember the

first song to use the language of computing as a mode of semantic discourse. What this means in plain English, is that computing has entered public consciousness to such a degree that a phrase which derives from computing can be successfully used to parallel an emotional idea, in this case the parallel being the lack of communication between two people and the lack of communication between a human and a PC.

The phrase 'Abort, Retry, Fail' is one people who used PCs in the bad old days will find spine chillingly familiar. Anyone who first experienced PCs in the days before Windows '95 actually made the PC a useable GUI based machine (Windows 3.1 was too painful to use, you really had to stick to MS-DOS if you wanted the machine to do anything) will have, somewhere on their souls, a little scar marked 'Abort, Retry, Fail'.

The first time you came across this little seemingly harmless grouping of words was usually when you tried to change directory to a volume

“The phrase Abort, Retry, Fail is one people who used PCs in the bad old days will find spine chillingly familiar. ”

that didn't exist. First you would Retry. Maybe it had just gone a little wrong. But no, it just asked you Abort, Retry, or Fail again. What next? Time to give up, tell it to abort. Uh-uh. Try that and what does it say? Abort, Retry, or Fail?

If you are new to computing, Fail sounds a little drastic, maybe even dangerous, you don't know what damage you might do. You just want out, to abort, so you type A again. No luck. You start to get wound up, hammering the A key, yelling at the machine, begging the little \$%&! to understand what you are telling it to do. Eventually, with fear and trepidation, and not a little desperation, you hit F for fail.

C>... Maybe computers are more human than we thought.

■ **Andrew Kern is**
■ **CB Group Magazine's**
■ **Staff Writer.**

Subscribe Now

SAVE MONEY!!

off a six month
subscription to

CU
AMIGA
M A G A Z I N E

25% OFF!!!

Subscription Priority Order Form

Ordering by phone

The easiest way to take out a subscription to CU Amiga Magazine is to order it by phone. Simply call 01658 435350 between 8.30am and 6pm, quote the type of subscription you want (eg: UK 12 months, UK six months, Rest of World 12 months), the source code and the relevant offer code (both codes can be found in the box below).

Name

Country (select applicable)

How are you paying?

By cheque/credit card Total

By ☐ Visa ☐ Access ☐ American Express ☐

Enclosed ☐

Bank and number

Card expiry date

Date Expires

Source Code: 12 issues	0010	36 issues	1A2F
Offer Code: 6 month CD edition	01U	36 issues	A2P
12 month CD edition	01K	36 issues	A2F

PRINT APPLICATIONS
From UK only: CU Amiga Magazine, Subscription Department, 1200
Commerce Way, Wokingham, RG40 3BT (Tel: 01329 617 446)

From Overseas: CU Amiga Magazine, Subscription Department, 1200
Commerce Way, Wokingham, RG40 3BT (Tel: 01329 617 446)

Ordering by post:

A. 6 month subscription

Please tick which one of the following subscriptions you want:

United Kingdom and NI	Disk version: £20.25	CD version: £27
Europe and Eire mail	Disk version: £26.25	CD version: £32.62
Rest of World Air Mail	Disk version: £33.75	CD version: £40.12

B. 12 month subscription

Please tick which one of the following subscriptions you want:

United Kingdom and NI	Disk version: £54	CD version: £72
Europe and Eire mail	Disk version: £70	CD version: £87
Rest of World Air Mail	Disk version: £90	CD version: £107

C. Your details

Title (Mr/Mrs/Ms) First Name

Surname

Address

HiSoft SYSTEMS

NEW LOW PRICES

NEW Cinema4D V3 £199.95
NEW CinemaFont £39.95
NEW CinemaWorld £39.95

Termite £39.95
 TermiteTCP £39.95
 Studio II Professional £49.95
NEW Disk Magic 2 £39.95
NEW Mazon Magic £29.95
NEW Media Magic £49.95
 Upper Disk Tools £14.95
NEW HiSoft C++ £169.95
NEW HiSoft C++ & Lite £79.95
 Devpac 3 £49.95
 HighSpeed Pascal £79.95
 HiSoft BASIC 2 £49.95
 Gamesmith £79.95

NEW Twist 3 Database £99.95
 ProFlight Simulator £19.95
 Aura 8 £34.95
 Aura 16 £99.95
 Clarity 16 £129.95
 ProMidi Interface £24.95
 Megalosound £34.95
 VideoMaster £19.95
 VideoMaster RGB £109.95
 VideoMaster AGA £79.95
 VideoMaster AGA RGB £129.95
 ColourMaster £69.95

Zip Drive (inc all cables) £159.00
 Jaz Drive (inc all cables) £449.00
 SMD-100 MPEG decoder £199.95
 Classic Squirrel £69.95
 Surf Squirrel £99.95
 2x CD-ROM Drive (inc all) £89.95
 4x CD-ROM Drive (inc all) £129.95
 12x CD-ROM Drive (inc all) £229.95

ALL MAJOR CREDIT CARDS ACCEPTED

POSTAGE £2, COURIER £6 (NEXT DAY £6)
 (SUN, MON, TUE & WED. DELIVERED BY COURIER ONLY)

HiSoft Systems
 The Old School
 Greenfield
 Bedford MK48 5DE

Phone 01525 718181
 Fax 01525 713716
 Email salee@hisoft.co.uk

SPECIAL OFFER
 SAVE £20 ON THE PRICE OF ANY SQUIRREL WHEN YOU ORDER A ZIP OR CD-ROM DRIVE

NEW WEB EXPLOSION NET FORCES



Compatible with librowse
 and most other browsers
 INCLUDES 120-PAGE
 COLOUR/BW MANUAL

WEB EXPLOSION

TWENTY THOUSAND
 WEB-PAGE SIZED GIFS AND JPEGs
 ON TWO COMPACT DISCS

INCLUDES

10,000 Buttons 1,000 Dividers
 500 Balleets 250 Textures
 750 Backgrounds 1,000 Photos
 250 Banners 7,000 Clip Art Images

£49

IBROWSE VERSION 1.10 NOW SUPPORTS FRAMES

"Currently the most advanced Amiga
 WWW browser..." CD Amiga Nov 95

£29



NET&WEB2 THE SERIOUS SURFER'S COMPLETE SOLUTION

Includes librowse, Email & FTP clients,
 plus the PPP ability of Termite TCP

£69

NET&WEB YOUR EASY
 INTERNET
 CONNECTION

£39

Includes librowse, Email & FTP clients
 Compatible with all major browsers



**HOT
 STUFF**

CALL FOR OUR
 COMPETITIVE PRICES
 ON 05.660'S BROWSE

CALL 0500 223 660 FREE

SERIOUSLY

FAST

ECONOMY ACCELERATOR BOARD

ECONOMY BOARD ALL INCLUDE 4MB RAM

68030 25MHZ INCLUDING 25MHZ FPU£99.95
68030 33MHZ INCLUDING 33MHZ FPU£139.95
68030 50MHZ INCLUDING 33MHZ FPU, Clocked up to 50MHZ£189.95

£99.95



FALCON BOARDS

FALCON 68040RC 25MHZ £229.95

MEMORY SIMMS

4MB SIMM 72-PIN£19.95
8MB SIMM 72-PIN£39.95
16MB SIMM 72-PIN£49.95
32MB SIMM 72-PIN£199.95
1 x 8 30 PIN£15.95
4 x 8 30 PIN£49.95



VIPER BOARDS

The Viper 33 can have up to 128MB RAM installed, full Kickstart remapping, optional SCSI II adapter, on-board battery backed clock, 68882 co processor option instruction and data burst modes

VIPER 33 MKII BARE£129.95
VIPER 33 MKII 4MB£159.95
VIPER 33 MKII 8MB£179.95
VIPER 33 MKII 16MB£189.95
VIPER 33 MKII SCSI ADAP £40.95

SPECIAL

6LI2ZARD BOARDS OFFER

68030 50MHz accelerator board with up to 128MB of RAM installable

6LI2ZARD 50 BARE£159.95
6LI2ZARD 50 4MB£189.95
6LI2ZARD 50 8MB£199.95
6LI2ZARD 50 16MB£239.95

CO-PROCESSORS

FPU's complete with crystal State for Blizzard compatibility

20MHZ FPU PLCC£20.95
33MHZ FPU PLCC£39.95
40MHZ FPU PLCC£60.95
50MHZ FPU PLCC£79.95
VIPER MKI SCSI ADAPTOR £79.95

GVP 68060/68040

A 68060 accelerator board for the A2000/4000 running at 50MHz and allowing up to 128mb of use installable memory and a SCSI-2 hard disk controller

A2000 68060 25MHZ£449.95
A2000 68060 40MHZ£589.95
A2000 68060 0MB RAM£599.95
A4000 68060 0MB RAM£749.95
4MB GVP RAM ADD£159.95



A500 68020EC

A 68020EC processor accelerator card for the A500 and A500+, with an option to fit a 68881 or 68882 co-processor (PLCC OR PGA). This card can fit up to 4MB FastRAM and is fully auto config. Not compatible with GVP Hard Drive

68020EC 0MB RAM£58.95
68020EC 4MB RAM£169.95

PRICES INC. VAT

SEE OPS AG FOR ORDER FORM

SPECIAL

X4 SPEED-CD-ROM OFFER

INC. SQUIRREL AND FREE SOFTWARE
FOR THE AMIGA 600/1200

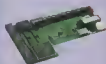
£179.95



TURBO BOARDS

Performance 10 times of a standard A600 68020 CPU clocked at 28MHz, 68882 FPU clocked at 28MHz, up to 8MB FastRAM, autoconfiguring, 4 sockets for 72 pin SIMM

TURBO B20£119.95



Performance 25 times of a standard A1200 68040 CPU with 25MHz, Up to 32MB FastRAM, autoconfiguring, socket for 72 pin SIMM

TURBO 1240 25MHZ +RAM £269.95

Performance 40 times of a standard A1200 68060 CPU with 50MHz Up to 32MB FastRAM, autoconfiguring, socket for 72 pin SIMM

TURBO 1260 50MHZ +RAM £499.95

Performance 3 times of a standard A4000/040 68040 CPU with 40MHz Up to 128MB FastRAM, autoconfiguring, 4 sockets for 72-pin SIMM Specify desktop or tower version

TURBO 4040 40MHZ£469.95



Performance 4.5 times of a standard A4000/040, suitable for the A3000 and A4000 68060 CPU with 50MHz, up to 128MB FastRAM, autoconfiguring, 4 sockets for 72 pin SIMM Specify desktop or tower version

TURBO 4060 50MHZ£659.95



VISA

01234 851500

POWER COMPUTING LTD

UNIT B2A SINGER WAY
WOBURN ROAD IND. ESTATE
KEMPSTON MK42 7PU
TEL: 01234 851500
FAX: 01234 855400
EMAIL: sales@powerc.
demon.co.uk